

# DOWNTOWN SEATTLE 2009 PUBLIC SPACES &

**PUBLIC LIFE** 

**GEHL ARCHITECTS** 









# **FOREWORD**

# BY MAYOR OF THE CITY OF SEATTLE, MIKE MCGINN

Seattle's Center City neighborhoods are the heart of the region and showcase much of what makes the Pacific Northwest unique—natural beauty, economic vitality, an ethic of environmental stewardship and social equity, and a strong and engaged community. These values have provided the guideposts for Seattle since the first Seattle Comprehensive Plan was developed in 1994 and have focused our efforts to improve the urban environment while planning for growth. In the Center City neighborhoods, the challenge of creating and sustaining vibrant and healthy streets and public spaces becomes increasingly important to our climate and business vitality.

At the City, we recognize the ongoing need to forge strong partnerships and find creative ways to make our streets more attractive to pedestrians and cyclists—as well as people who want to enjoy and linger in our public spaces to take in all that Seattle has to offer. With this in mind, the City of Seattle entered into a partnership with the International Sustainability Institute, the University of Washington Green Futures Lab and the Scan Design Foundation to assess the critical role walking and vibrant public space play in sustaining the health of people, our communities, and our environment. The assessment was developed with the help of world-renowned urban quality consultants, Gehl Architects.

Seattle now boasts the most comprehensive Public Spaces & Public Life study of any city in America. This study helps us better understand how Seattleites—and the visitors Seattle attracts from around the region—spend their time in the city. We counted how many people walked, how many people were using our parks and other public spaces, and observed the kinds of activities in which people were engaged. We also examined the routes people used to get where they were going.

The Public Spaces & Public Life study contained in this document is the result of the effort to look specifically at the Center City's public spaces, better understand the patterns and qualities that make walking, biking, and enjoying the city desirable, and recommend both near and long term actions to make this plan a reality. A number of exciting new initiatives are moving forward this year such as the Bell Street Park Boulevard, the McGraw Streetcar Plaza at Times Square, and the Summer Streets program.

It's no accident that the Downtown Seattle Association and Great City are strong partners in this effort as they recognize that a strong and healthy public realm—a walkable, bikable downtown—is key to our economic vitality and sets us apart from other cities. Creating invitations for people to walk, bike, and spend time outdoors makes the city a more attractive place to

be. The Seattle Public Spaces & Public Life study recommendations have been integrated into other planning and project work already underway, including the Seattle Pedestrian Master Plan and Center City Public Realm Framework. Each of these efforts aims to strengthen our communities and businesses, to connect our neighborhoods to each other and to our world-class waterfront, and to be an essential component of the City's overall sustainability strategy.

In a world environment struggling to stay healthy, these changes cannot come soon enough. This keen interest in sustainability, economic vitality, and community health gives everyone at the City of Seattle a sense of urgency and interest in making this shift.

Michael Mc &

Michael McGinn

Mayor

# **FOREWORD**

# BY INTERNATIONAL SUSTAINABILITY INSTITUTE, TODD VOGEL

It took a lot of courage for Seattle's leaders to embark on this project. Bringing in outside experts - no matter how confident we are - can create challenges. And studying our city in excruciating detail has the potential to lay bare vulnerabilities. It is a testament to Seattle City leaders' commitment to making Seattle more environmentally sustainable and a more inviting place that they faced these challenges and made the study you hold in your hands.

And, oh, what a study it is. When ISI first started to gather the team to study Seattle's public life, we knew it would be a big undertaking. But we didn't know the full extent. After it was all over, the skilled hands of Gehl Architects had met with city staff and leaders all around the city. They had corralled nearly four dozen committed University of Washington graduate students through Nancy Rottle's Green Futures Lab and hiked every street and every alley in the downtown core. And, through the generosity of the Scan|Design Foundation, it led two UW students to Copenhagen to assist with this in Gehl Architect's office. Gehl Architect's analysis of the collected data along with its forty years of experience working in more than 400 cities around the globe gives us a fresh eye on the workings of public life in Seattle.

The results show a city with stunning opportunity. They show us a city that is thriving and has the promise to be even more magnificent than it already is. Gehl Architects have laid out a vision for Seattle that includes both quick wins and some recommendations that will take more time - and, likely, generate much debate among our citizens. Nevertheless, data has been collected, the analysis made and the walk down the path to making Seattle still more environmentally sustainable and livable has begun. It is a combination of courage and commitment that all of Seattle should be proud of.

Todd Vogel Executive Director

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# STUDENTS INVOLVED

Without the very enthusiastic help and efforts of the students from the University of Washington Scan Design Interdisciplinary Master Studio (2008), and Associate Professor Nancy Rottle from the College of Architecture and Urban Planning at University of Washington, we would not have been able to collect all the "public life" data represented in this report, including information on pedestrian movement, stationary activities, and the demographics.

These students, listed in alphabetical order, participated in the following;

Winter survey, February 2008

Summer survey, July 2008

Demographic survey; July 2008

Survey coordinator on site:

Liz Stenning

## **USE OF STUDENT WORK**

In the chapter on Strategies/Public Space Programs /Alleys we have used illustrations produced in the University of Washington Scan Design Interdisciplinary Master Studio (2008) taught by Associate Professor Nancy Rottle and Assistant Professor Kathryn Merlino. In the document all illustrations are credited to the authors.

## **GOAL**

This document offers an introduction to a new way of recording and understanding the importance of public life in an urban context.

Public life recordings are used as the basis for proposed strategies and reconfigurations of the space between the buildings and to prioritize people activities, which, in turn, make our streets and cities lively. Encouraging this liveliness pays another dividend. It increases the number of pedestrians and bicyclists, who play a vital role in moving people out of their cars and onto the sidewalks where they can interact with one another.

Seattle is a gifted city with a stunning landscape, engaged citizens and city officials who yearn to make the city still more livable. It is in the spirit of nurturing these remarkable resources - and inspiring its leaders still further - that Gehl Architects offers these visions, analyses, and strategies.

We hope that it will serve its purpose well.

Helle Søholt,

Partner, Gehl Architects

## **TASK**

The actual tasks were defined in a process between Director Grace Crunican, Seattle Department of Transportation, Director Diane Sugimura, Seattle Department of Planning and Development and Partner Helle Søholt, Gehl Architects, through various meetings, visits and telephone conferences during Autumn 2007.

The team decided to focus on a specific area within Downtown Seattle plus on three specific smaller areas; King Street Station, the intersection of Mercer Street and Aurora Avenue and parts of First Avenue. In a year long process, Gehl Architects conducted analysis, recorded public life during Winter and Summer and illustrated overall recommendations for the identified areas.

# **HOW TO READ**

The **INTRODUCTION** reflects on the overall Center City potentials, challenges and achievements.

The ANALYSIS is divided in three sub-chapters: The City describes the quality of the public realm - the network, the urban landscape and the culture. The People describes the public life taking place in selected areas, where and when do people walk, sit and interact. The Summary gives a brief "hands-on" overview of problems and potentials.

The **RECOMMENDATIONS** illustrates visions, "blue sky thinking", and concepts on different levels, divided in three sub-chapters: The Strategies identifies six overall Center City approaches to strengthen public life. The **Public Space Programs** illustrates how to apply these strategies to the focus areas. It establishes programmatic approaches to pedestrian needs and places for citizens to interact. These are not public space designs. The **Quick Wins** are solutions that could be applied within a very short time frame. They may be temporary or permanent. But each Quick Win helps build awareness for the long-term process of creating more people spaces in the Center City.

The **INSPIRATION** describes the process of how Barcelona, Lyon, Melbourne, Copenhagen and New York have been turning their focus and goals towards "better people places". It also describes three waterfront examples where great inspiration regarding human scale, active and mixed-use functions and successful public life can be found. Returning to this data and collecting new data in the years ahead will be crucial steps in Seattle's path to becoming still more livable and vibrant.

The **REFLECTIONS** describe how the Public Spaces Public Life Survey can be used as a tool and reflects on the process ahead.

As an appendix to this document the **DATA COLLECTION** contains all the collected data from the public life surveys and the demographic survey.

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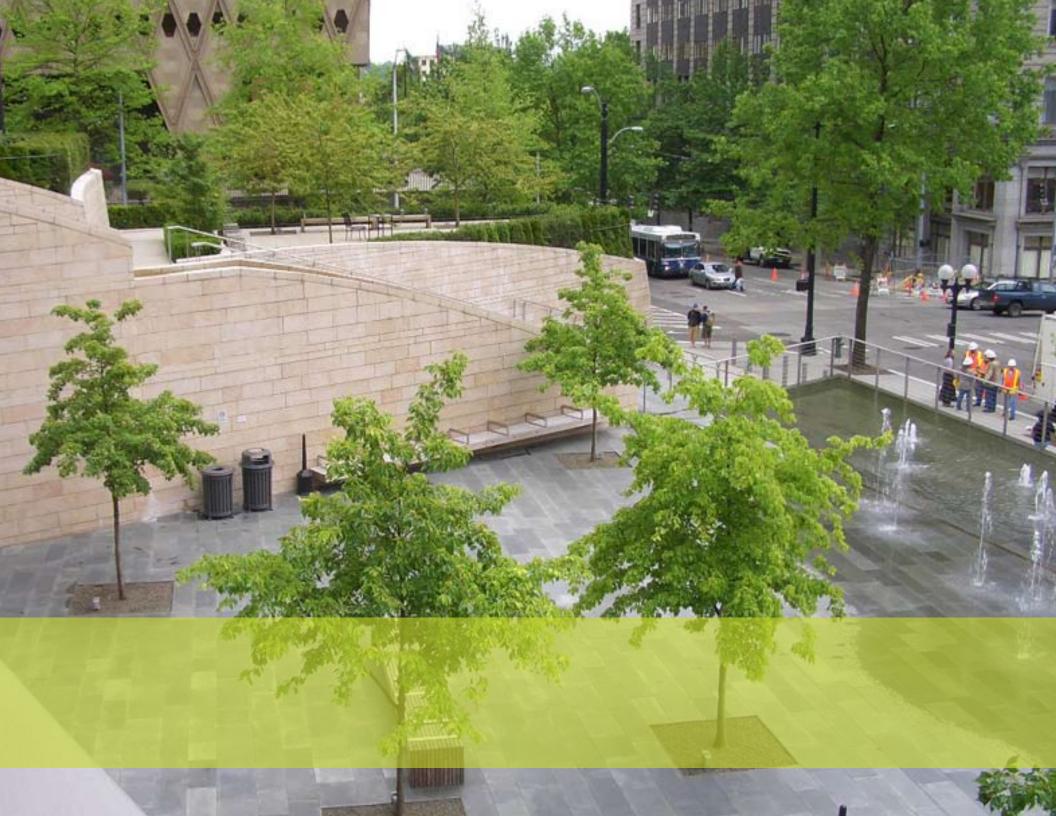
The INTRODUCTION reflects on the overall Center City potentials, challenges and achievements.

# INTRODUCTION

THE LIVABLE CITY

POTENTIALS & CHALLENGES

**ACHIEVEMENTS** 





## THE CITY...

# THE "EVERGREEN" STATE AND THE "EMERALD CITY"

Mountains, water, and climate have had an unmistakable influence on the physical development of cities in Washington State. This ingrained conversation between the built world, water bodies, and unique topography is a large part of the region's identity and appeal. The Seattle region offers many opportunities for enjoying the forests, mountains, and water that give Washington State its "evergreen" reputation.

Time can be measured with a calendar of activities, from sailing to hiking to skiing. Outdoor activities are an important part of Seattle's lifestyle.

#### A CITY WITH A BEAUTIFUL SETTING

Seattle is the urban heart of the western "evergreen state," and downtown is the heart of Seattle.

Downtown has a classic American grid system of streets and blocks, with a fantastic and challenging topography that gives the city its own unique character. The setting on the Puget Sound lends a distinct flavor to the city, and views from the steep streets to the water and mountains are breathtaking.

### ...AND ITS PEOPLE

#### **CREATIVITY & DIVERSITY**

Seattle is widely recognized for its many neighborhoods. Each has distinct qualities and identity, and many have particularly creative, playful atmospheres. The neighborhoods, often once townships of their own, attract a diverse mix of residents, businesses, recreational activities, and visitors.

Seattle is also known for its cultural contributions. A few that put Seattle on the map worldwide are: The Seattle Art Museum, music festivals at Seattle Center, the Symphony, Opera & Ballet, the Seattle International Film Festival, all supported by the modern/alternative/independent music, film, art, dance and theater scenes.

Other cities long for a reputation as a "creative" city, and Seattle already has this identity with a great potential to strengthen this further.

#### A UNIVERSITY CITY

Seattle ranks as the one of the nation's best-educated big cities. There are many higher education institutions located in Seattle. This contributes a great deal to the atmosphere of Seattle. Students inhabit and activate the public realm and add a dynamic element to city life.



# THE LIVABLE CITY

The livable city is one that offers a variety of attractions and opportunities to citizens and visitors.

A livable city puts public life at the center of planning, strengthened by an overall focus on liveliness, health, attractiveness, sustainability and safety.

The human, cultural and social aspects should be carefully taken into consideration to deliver truly sustainable developments for the future. In other words, the planning process needs to have a holistic approach.

Or, as the international lifestyle magazine, The Monocle puts it, when rating the most livable cities in the world:

"...a combination of good ideas, good planning and manageable scale, plus a sound grasp of environmental issues, regional transport and a variety of subjective but nonetheless important elements like food culture, housing design and a sunny disposition..." that "...you have to get out on the streets and experience."



# LONG TERM STAYS MAKE LIVELY CITIES

The activity level will rise remarkably when pedestrians or people indoors are tempted to spend time in inviting and comfortable public spaces. The extent of staying activities has the largest impact on the activity level in a public space.

# • A VARIATION OF PLACES CREATE LIVELY CITIES

Smaller gestures inviting people to stay in nice places can tempt passers-by to linger for awhile. Informal spaces people can visit during breaks or outdoor serving areas can invite people to dwell in public spaces with possibilities for recreation and refreshments. An inviting space offers good comfort, sun, views, other people, shelter, and a respect for human scale. A balance between active and calm places is important to invite many user groups.

# MANY USER GROUPS CREATE LIVELY CITIES

When a city is able to invite many different groups to use the public spaces - the elderly, disabled, children, families, young people, working people etc. - a more varied use of the city can be obtained both in terms of activities and time of day, week or year. A lively city does not rule out specific user groups to invite others, but invites a great variety of all users to get the balance right.

# BALANCE BETWEEN ROAD USERS CREATES LIVELY CITIES

When traffic volumes are low and traffic moves slowly there tends to be more public life and more opportunities to meet in the public spaces. A good balance between the road users can often be achieved by inviting people to walk, cycle or take public transport instead of the car.

# • A STRONG PEDESTRIAN NETWORK MAKES LIVELY CITIES

Walking should be simple and attractive. A network that connects destinations, lovely promenades, good climatic conditions, interesting things to look at, safety throughout the day all contribute to walking.

Walking activities need to be concentrated in a network of lively, attractive and safe main streets following the principle "to concentrate" as opposed to "spread out," to ensure an active public realm.

# PLANNING FOR OPTIONAL ACTIVITIES CREATE LIVELY CITIES

All cities, regardless of the quality of the public realm, have people engaged in necessary activities; walking to and from, waiting for the bus etc. The quality of the public realm can be measured in how many people choose to visit for optional reasons because the city offers a variety of experiences to enjoy the public realm, look at other people, meet friends and engage in urban activities.

### SUCCESSFUL PUBLIC LIFE

#### WHAT ARE THE KEYS TO SUCCESSFUL PUBLIC LIFE?

A good indicator of successful public life is people's use of the public realm for a variety of activities during the course of a typical day. Two factors that can be observed and recorded readily are:

- 1) Number of people in a public space;
- 2) The amount of time people spend in the public realm.

Spaces where a large number of people linger for a long period of time tend to be more successful. Spaces with few people walking slowly or lingering for long periods of time are perceived to be less successful.

This observation underlies the principles stated at left that are the basis for the work described in this report.

## **DOWNTOWN POTENTIALS**







#### **FANTASTIC SETTING**

#### **POTENTIAL**

Seattle has a magnificent setting. The mountains and the water are great elements of Seattle's identity. Even in the inner city it is possible to catch a glimpse of these treasures. The natural amenities situated near the city give an extra dimension to urban life in Seattle.

#### **EXPLORING POTENTIAL?**

The magnificent setting is not explored to its fullest potential and the city's waterfront is still a hidden treasure.

#### DOWNTOWN PLACED IN THE CENTER

#### **POTENTIAL**

Seattle is famous for its many appealing neighborhoods. Downtown is well situated in the center of multiple neighborhoods, and therefore plays an important role in connecting the various parts of Seattle.

The grid structure makes it easy to orient oneself and the fairly flat and wide streets and sidewalks that run north and south form the perfect base for a potential culture of more walking and biking in downtown.

#### **EXPLORING POTENTIAL?**

Downtown tends to serve as a connector between the surrounding neighborhoods or a place you go with specific purposes, such as to work, rather than a recreational destination or an urban hub with its own pulse. Making downtown more livable and inviting more people to walk and bike would ways to get more out of its prime location.

#### DISTINCT SURROUNDING NEIGHBORHOODS

#### **POTENTIAL**

The urban life of Seattle is characterized by "urban villages" or neighborhoods located around downtown, in which much of the city's social activities take place.

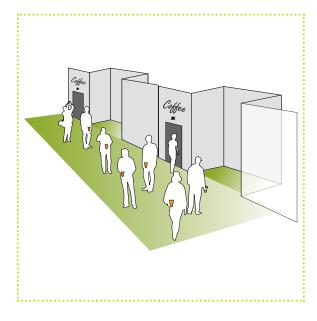
#### **EXPLORING POTENTIAL?**

Neighborhoods play an important role in characterizing the identity of Seattle as a city. Strengthening downtown districts with a neighborhood-like character of their own would explore this potential even further.

## DOWNTOWN POTENTIALS







#### FINE BASE FOR WALKING

#### **POTENTIAL**

In general, downtown has wide and easy accessible sidewalks of good quality. Very few intersections lack a marked crossing or pedestrian signals. Together this provides a fine base for walking in the city.

#### **EXPLORING POTENTIAL?**

To invite more people to walk, extra layers can be added to the experience of walking, such as traffic signals timed for pedestrian speed, attractive ground floor facades, invitations to sit and rest along the streets, pedestrian scale streelighting and clear organization of the sidewalk space to enable unobstructed walking.

#### **ACTIVE DURING WORK HOURS**

#### **POTENTIAL**

Seattle is active during work hours. Many people commute into downtown for work, which creates activity.

The city has a fair number of visitors and tourists, who spend time in downtown during the day.

#### **EXPLORING POTENTIAL?**

It is encouraging that downtown already has a lot of regular visitors. This can be explored further to make downtown more inviting and make people stay even longer.

#### **GREAT COFFEE CULTURE**

#### **POTENTIAL**

Seattle has a significant coffee culture. There is a coffee shop on almost every third corner. Starbucks is famous around the world, and the fact that it originated in Seattle is not surprising when you visit the city. A lot of activity is taking place around and within the coffee shops; for instance, it is common to meet for business in a coffee shop. The coffee culture seems to be an integrated part of everyday life in Seattle.

#### **EXPLORING POTENTIAL?**

A distinct urban culture has not developed along with the coffee culture. Explore ways to use the coffee culture as a starting point to generate more outdoor public life.

## **DOWNTOWN CHALLENGES**







#### **DISCONNECTED WATERFRONT**

#### **CHALLENGE**

Downtown has a beautiful setting at the water's edge that is not fully embraced.

#### **CONSEQUENCES**

Downtown and the waterfront are poorly connected in terms of pedestrian links, functions, views and vistas, mainly as a result of the Alaskan Way Viaduct.

The waterfront itself could be much more vibrant and interesting, and less dominated by traffic structures. The waterfront has under-utilized potential.

#### **WEAK PUBLIC LIFE PATTERNS**

#### **CHALLENGE**

Downtown is placed in the center of Seattle yet there is a fragile pattern of urban life, with few informal recreational activities taking place, compared to other similarly sized cities. It is an anonymous city center having a hard time competing with the active and lively neighborhoods around it. Most of the activities taking place are considered necessary activities" such as offices and commercial operations.

#### **CONSEQUENCES**

All the other neighborhoods in Seattle have a distinct character, but downtown is less defined.

There is a great deal of important destinations in downtown, but they are poorly connected, and the destinations can fail in generating public life activities. Downtown is not a place that succeeds in inviting people to go to for informal activities such as strolling, window shopping and hanging out.

#### MINIMAL OPEN SPACE IDENTITY

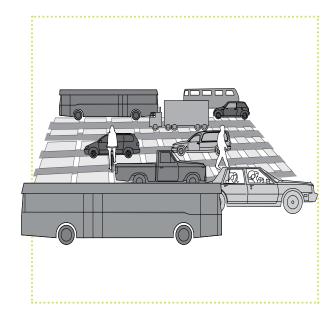
#### **CHALLENGE**

The public space network is unclear, since downtown tends to lack interesting, inviting and varied public spaces. The public space hierarchy is unclear - where are the hearts of the city? Where are the places for quiet reflection or the places for physical activities and play?

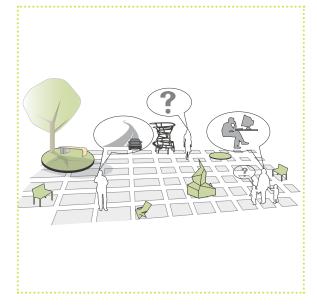
#### **CONSEQUENCES**

The poor public spaces and the office/retail focused activities in downtown cause fragile user patterns. A strong public life culture demands a city with more invitations throughout the day, week and the year.

## **DOWNTOWN CHALLENGES**







#### **UNBALANCED TRAFFIC SYSTEM**

#### **CHALLENGE**

Downtown is bound on two sides by two major traffic arteries by I-5 to the east and the Alaskan Way Viaduct to the west. - These highways create barriers and lower the quality of downtown in general, particularly for outdoor public life.

#### **CONSEQUENCES**

In downtown, the car tends to be 'king,' meaning that vehicular traffic flows are highly prioritized, at times compromising pedestrian and bicycle flow. Part of the problem is that downtown acts as an bottleneck for through-traffic, which means that rebalancing the traffic in downtown demands changes in the overall traffic system of Seattle.

#### OFFICE FOCUSED DOWNTOWN

#### **CHALLENGE**

Overall, Downtown is dominated by offices and retail and lacks residential units, especially for families. Furthermore, there are some downtown areas where either offices or retail shops dominate.

#### **CONSEQUENCES**

The lack of diversity and mix in functions has a number of side effects. There are generally fewer attractions and unique experiences in each area leading to a lack of mixed user groups. This results in more uniform populations with similar patterns of use. In terms of public life, downtown is only highly active during office and retail hours. This leads to a perceived lack of safety in downtown in the evenings and weekends and also impacts the use of public spaces.

#### FRAGILE URBAN CULTURE

#### **CHALLENGE**

The coffee culture is great, but it does not translate into a city culture. Downtown does not seem to be a place where you just spend time or even enjoy your coffee in the public spaces. Downtown open space has lost its important role as a preferred meeting place.

#### **CONSEQUENCES**

The public spaces seem underutilized. Few public spaces in downtown manage to invite people to spend time for informal recreational purposes and leisure. The outdoor city culture is generally underdeveloped in Seattle and the city needs more instantly appealing and inviting public spaces. Lack of public life is a self-perpetuating process. Higher levels of public life tend to generate more life while lack of public life has the opposite effect.

## **ACHIEVEMENTS**

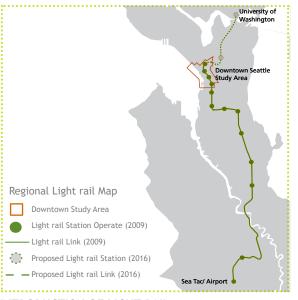
#### A MULTI-PRONGED STRATEGY

Seattle has developed and strengthened its public realm through a multi-pronged strategy, putting focus on, and getting tangible results in, four important areas:

- Public Transport initiatives
  - Introduction of light rail and more streetcar lines
  - Development of bicycle- and pedestrian master plans
- Densification
  - Belltown
  - South Lake Union
  - Denny Triangle
  - South Downtown
  - Yesler Terrace
- Public Realm Improvements
  - The Olympic Sculpture Park
  - Bell Street Park Boulevard
- New Public amenities
  - The Central Library
  - Expansion of Seattle Art Museum Downtown

These strategies need to be taken further to achieve the right synergy, a change of behavior and a permanent effect on the public realm of downtown.

With the potential opportunities along the downtown waterfront, now is the time and the opportunity to put focus on the quality of the public realm in downtown, inviting more people, getting them to walk, bicycle, and stay longer.



#### INTRODUCTION OF LIGHT RAIL

Downtown is well connected with adjacent neighborhoods and the Seattle area, with the light rail running from the international airport to downtown.



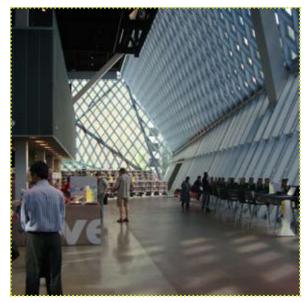
THE OLYMPIC SCULPTURE PARK

Turning a brownfield into the Olympic Sculpture Park has resulted in a city wide attraction.



#### TRANSFORMATION OF BELLTOWN

Belltown has undergone an impressive transformation and is now one of Seattle's blooming neighborhoods.



THE CENTRAL LIBRARY

With the opening of the Central Library in 2004, downtown got an amazing public amenity inviting more than 2 million visitors in 2005.



The ANALYSIS is divided in three sub-chapters:
The City describes the quality of the public realm the network, the urban landscape and the culture.
The People describes the public life taking place in
selected areas, where and when do people walk, sit
and interact. The Summary gives a brief "hands-on"
overview of problems and potentials.

# **ANALYSIS**

# THE CITY THE PEOPLE



# THE STUDY AREA

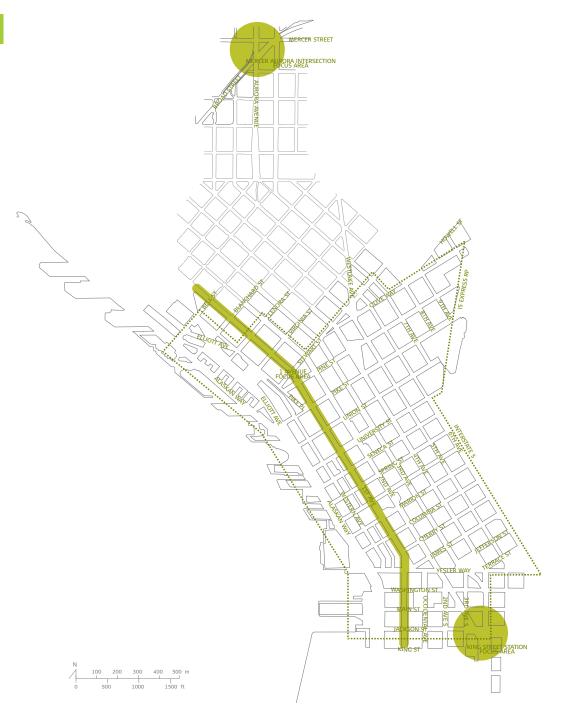
The main focus of this study is the area of Downtown Seattle defined by King Street to the South, Bell, Lenora and Steart Streets to the North, I 5 Freeway and 4th Avenue (south of Yesler Way) to the East and the Waterfront shoreline to the West. (See map to the right)

Three specific focus areas have been selected; King Street Station Area, 1st Avenue, and the Mercer Street and Aurora Avenue intersection.

These areas encompass the city core, more or less within a walkable distance, which allows for a study of network and coherence as well as connections to the bordering areas.

The study area comprises approximately 398 acres/1.610.000m<sup>2</sup> and the outline has been determined in close coordination with City of Seattle.

The same approach for selecting the study area has been used in a number of previous studies including San Francisco 2008, Sydney 2007, Melbourne 2004 and Copenhagen 2006, which allows for comparable studies and analysis.



#### **SYDNEY**

23,680,800 ft² / 2,200,000 m²
15,000 residents in the study area (2006)
68 residents per hectare in study area
(4 million residents in the metropolitan area)



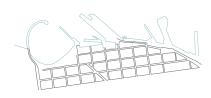
#### **COPENHAGEN**

12,378,600 ft² / 1.150.000 m²
7,600 residents in the city center (2005)
66 residents per hectare in study area
(1.2 million residents in the metropolitan area)



#### **MELBOURNE**

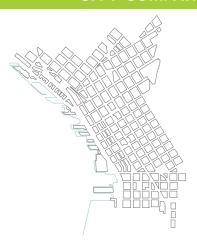
24,757,200 ft² / 2,300,000 m² 12,000 residents in the study area (2006) 52 residents per hectare in study area (3.5 million residents in the metropolitan area)



#### SAN FRANCISCO- FISHERMAN'S WHARF

6,996,600 ft² / 650,000 m²
582 residents in the study area (2008)
9 residents per hectare in study area
(7 million residents in the metropolitan area)

# **CITY COMPARISONS**



#### SEATTLE

17,330,000 ft² / 1,610,000 m² study area 4,300 residents in the study area (2008) 27 residents per hectare in study area (3,424,000 million residents in the metropolitan area)



#### **NEW YORK - LOWER MANHATTAN**

19,900,000 ft² / 1,850,000 m² 300,000 residents in the study area (2008) 1620 residents per hectare in study area (19 million residents in the metropolitan area)

## **THE ANALYSIS**

Based on quality criteria established by Gehl Architects, students from the University of Washington took to the streets in the study area to inventory features of the urban environment, observe people's interactions with the urban environment and surveyed people on their use of space in the downtown area. Quantitative and qualitative data were collected in both winter and summer of 2008. The results of this analysis are summarized and illustrated on the following pages.



#### QUALITY CRITERIA FOR A GOOD CITY NETWORK

# CONNECTS DESTINATIONS & PLACES

- ensures access to transport hubs, visitor destinations and city services
- ensures access to public squares and parks

# ENSURES BALANCE BETWEEN ROAD USERS

- prioritizes soft road users i.e. pedestrians and bicyclists
- new road types with shared space and pedestrian priority

# IDENTIFIES A HIERARCHY OF STREETS AND LINKS

- activates main streets by concentrating pedestrian flows, rather than spreading them out
- identifies transport corridors

# INVITES ALL AGES FROM CHILDREN TO SENIORS

- ensures wide sidewalks and traffic signals for pedestrians
- enforces low vehicular traffic speeds
- provides bicycle tracks

# IS LEGIBLE, ACCESSIBLE & SAFE FROM ACCIDENTS

- clear division between soft and hard road users
- human scale signage 3mph
- applies guidelines and measures for disabled

# ENSURES A FEELING OF SECURITY - DAY AND NIGHT

- pedestrians and bicyclists concentrated on main routes at night
- network well linked to main public transport hubs

#### **HUMAN SENSES**







1000 STIMULUS PER HOUR 1 PER EVERY 4 SECONDS

# 72°





### **GOOD NETWORK & HUMAN SENSES**

#### THE IMPORTANCE OF NETWORK

The urban grid of downtown forms the base for a high quality city network. The network ensures connectivity and mobility, hierarchy of streets, legibility and safety, and improves the quality of the experience of moving around the downtown grid.

The figure to the left summarizes a set of key principles for achieving a good city network and serves as a guide for assessing Seattle's public space network.

#### **HUMAN SENSES IN PLANNING**

Human beings have not changed through modern times, and the basic needs and senses of humans remains consistent across the globe.

The way we as human beings perceive and experience places is tied to our senses. The five most well-known are the Aristotelean senses of sight, hearing, taste, touch, and smell. 75% of all sensory impressions are perceived through eye sight.

The human is a walking being, moving with an average speed of 3 mph. We experience the city from an average height of 57". The human brain needs approximately 1000 new stimuli per hour in order to remain alert.

This is why we enjoy walking along city streets with facades that vary about every 30 feet: they keep our brains stimulated. Likewise, when we sit in public spaces we want to sit so that we can look at other people walking by or engaging in activities.

## WALKING IN THE CITY

#### STEEP TOPOGRAPHY

In Seattle the topography is both a blessing and a challenge. It gives the city a beautiful setting and creates magnificent views. But the topography is a challenge for pedestrians and bicyclists.

In downtown everything is within reasonable reach for people walking. A rule of thumb is that people are willing to walk 0.6 mile, and it will take approximately 10-15 minutes. This rule is challenged by Seattle's topography, but fortunately the east-west blocks tend to be shorter than those running north-south.

The hills pose a challenge for walking, and even walking downhill is difficult for certain groups, for example wheelchair-users or people with baby carriages or similar loads.

**75**% ARE WILLING TO WALK MORE THAN **9** BLOCKS\*







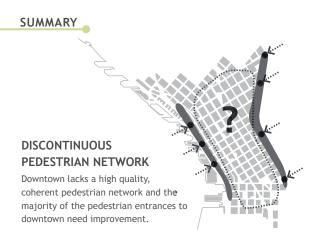
## PEDESTRIAN NETWORK

A good pedestrian network invites people to walk along appealing, comfortable, and uninterrupted links that bring people from one end of the city to the other.

A pleasant streetscape can be characterized as being comfortable and interesting to walk along, with transparency and activity on the ground floor, interesting paving and other street elements that create a cohesive design.

A high quality pedestrian network also consists of well connected, pleasant pedestrian routes. In downtown there is no continuous high quality pedestrian network. There are some stretches of streets with a pleasing walking environment, but no links connect these streets into a network of high quality pedestrian routes. For instance, there are sections with activity and active façades along First Avenue, but its total length and side streets do not function as one complete high quality walking link. A good network is also related to hierarchy and variation in the different streets. This makes the experience of walking more interesting but also the city more legible since it is easier to navigate.

The pedestrian entrances to downtown are also important. Are they welcoming? In general, the entrances do not invite pedestrians into downtown when arriving from the east and the waterfront.





# INTERRUPTION OF PEDESTRIAN FLOW: ALLEY INTERRUPTION OF PEDESTRIAN FLOW: GARAGE ENTRANCE/EXIT Asphalt communicates car space, so even though the sidewalk level remains consistent, the design tends to prioritize cars driving in and out of garages. The bar across the garage exit increases safety if it forces cars to fully stop before driving across the sidewalk. It can also alert drivers to be more aware of pedestrians 1500 ft crossing the exit.

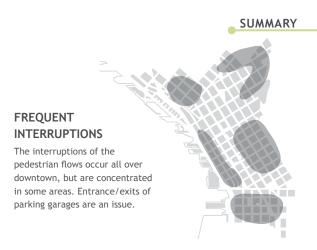
## PEDESTRIAN ACCESSIBILITY

Pedestrian accessibility covers a number of issues. In downtown the fairly wide sidewalks are a positive aspect of the city's accessibility. However, accessibility may be decreased in some places by the organization of the sidewalks, including the sidewalk interruptions, bus stops, and other street elements.

The analysis on this page shows where the pedestrian flow on sidewalks is interrupted by cars crossing, either in or out of alleys or entering and exiting parking garages.

Cars driving in and out of garages must cross the sidewalk; the question is, how is this organized? Who is prioritized - the pedestrian or the car?

In most cases the downtown sidewalks are kept at a consistent level, which is positive. But the choice of pavement material at the interruptions, the width of the entrances and exits to garages, and the poor visibility mean that cars are ultimately prioritized. Pedestrians must be alert and often have to stop and wait for cars. This is a difficult situation especially for the elderly, children, or people with disabilities. It is important that pedestrians feel safe on the sidewalk. Ideally, sidewalk organization should always give pedestrians the right of way, so it is clear to cars that they must wait for pedestrians.



## **PEDESTRIAN CROSSINGS**

The design of crossings has a lot to do with pedestrian accessibility: the type of signals, the level of safety and the legibility for people with disabilities

 Lack of pedestrian crossing signals or markings makes for a dangerous situation and should be avoided in an inner city area.

Pioneer Square has high pedestrian activity and it is surprising that there are no pedestrian crossing signals especially since it is heavily trafficked with more than 17,000 average weekly daily traffic (AWDT).

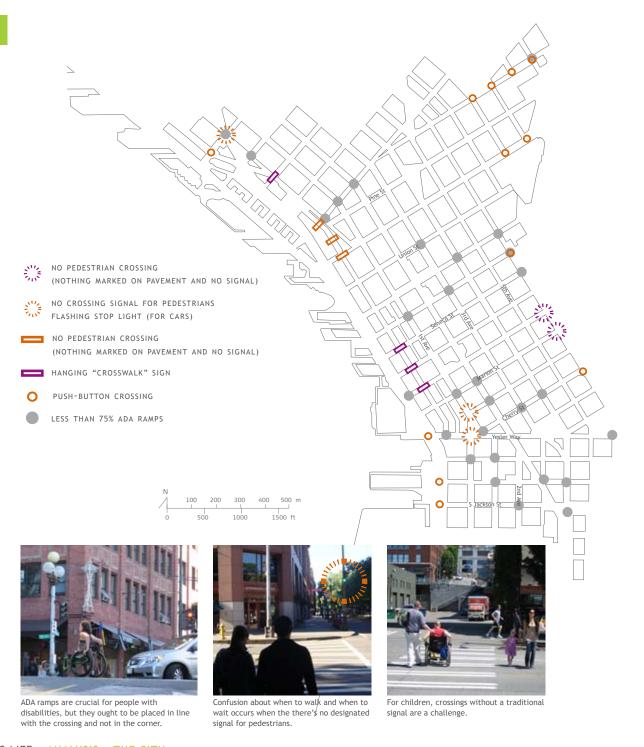
- 2. Flashing stop lights may work on streets with low traffic volumes, but should be avoided in downtown. While the pedestrian has the right-of-way in these situations, this type of crossing still involves an element of negotiation between driver and pedestrians. For instance, a pedestrian would be wise to make eye contact with the driver to ensure they are seen.
- **3.** Push-buttons are crossings where the walk light is only activated by the pedestrians. However, this may invite jaywalking when no vehicular traffic is present.
- 4. In crossing, curb ramps are crucial for people with disabilities. The way the ramps are placed is also of significance so wheelchair users and others do not have to take a detour at intersections. This becomes even more important with free right-turns for cars.

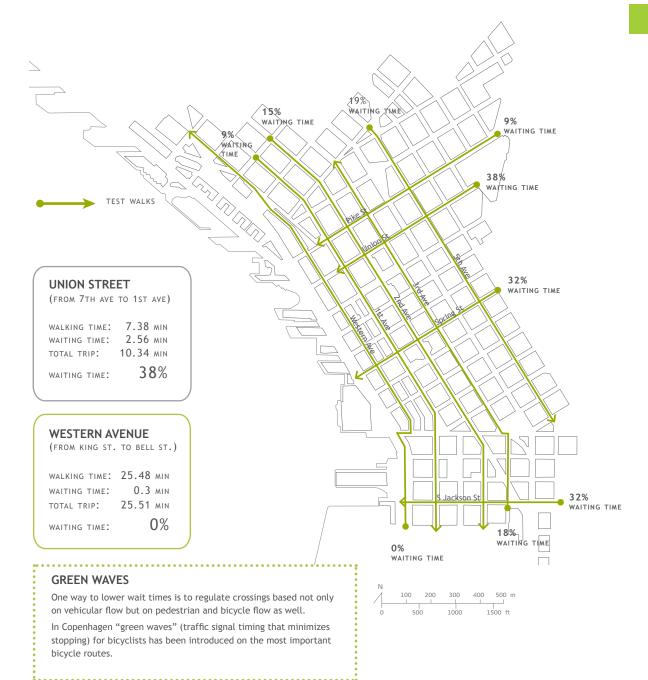
#### SUMMARY

# POOR CROSSING QUALITY IN SOME AREAS

Some areas lack pedestrian signals and markings. Major pedestrian destinations such as Pike Place Market and Pioneer Square could benefit from improved pedestrian crossings.







## **WALKING FLOW**

When walking down 1st Avenue, how much time do you spend waiting at crossings? The walking and waiting time is calculated based on a "normal" walking speed of approximately 3 miles per hour (MPH). In order to keep the walking speed as even as possible throughout the studied routes, the calculation on the east-west routes is based on walking downhill.

Waiting times are shorter along the north-south routes than on the east-west.

The fastest route is Western Avenue with almost no waiting time at all. This has to do with low traffic volumes and the fact that only a few crossings are regulated by signals, making it possible to cross the street if there are no cars.

3rd and 5th Avenues have the longest waiting times. It is worth noting that 3rd Avenue is a major transit corridor and therefore has many pedestrians. On most of the studied east-west routes, pedestrians spend a long time waiting at crossings. This means that the time it takes a person to walk from point A to point B is increased by more than 30%.

A negative side effect of long wait times is that people tend to resort to jaywalking which creates dangerous situations.



## **BICYCLING IN DOWNTOWN**

Bicycling is like walking - it is about invitations. Does downtown invite people to use bicycles as daily transportation? Does downtown invite all age groups to ride bicycles?

Unfortunately, it does not. The type of people choosing to cycle reveals a lot about the system. Mostly "tough" cyclists ride in downtown. The east-west steep topography presents a challenge for cyclists. However, this could be addressed with signage indicating more gradual routes (e.g., The Wiggle, a bicycle route in San Francisco).

Aside from the issue of topography, the network is incomplete, making it difficult to bike, since a cyclist may ride on a bike lane for a few blocks only to find themselves riding in vehicular traffic again. These factors hinder many people from using the bicycle for daily activities.

The existing bicycle routes suffer various problems:

- Bike lanes are placed between parked and driving cars, rather than next to the sidewalk.
- For sharrows to be effective drivers need to be educated about the meaning and the value of sharing the roadway with cyclists. If drivers are not aware of the sharrow, the cyclist may easily end up competing with cars for the road.
- Bicycling is also about enjoyment and attractive routes. There are few, if any, bicycle routes of this quality in downtown. The waterfront bike path is a fairly continuous bike route but it is interrupted by crossing streets. The location of the waterfront bike route on the east side of Alaskan Way also limits the view of the water for cyclists.



#### **USER GROUP**



Most bicyclists in downtown are "tough" bicyclists, for whom biking is a lifestyle or a form of exercise. Seattle's bicycle network does not invite all age groups to cycle.

Topography is a challenge for bicyclists - but it is good exercise!

# **BICYCLING IN DOWNTOWN**

The bicycle network ought to invite more people to ride bicycles - a good bicycle network invites all age groups.

The type of bicycle routes and the way they are designed ought to be reconsidered. The present bike lanes and sharrows are a good start, but it would be good to aim for even higher standards creating a safer bicycle environment.

#### **BICYCLE ROUTES**



A "bike lane" is marked by a solid line. It is placed between parked cars and driving cars causing cars to drive across or open doors into the bike lane. This requires drivers and passengers to respect the bike lane so as not to open the car door and hit a cyclist.



Sharrows are an interim strategy in creating a cycle culture in Seattle. Drivers may not looks out for bikes, and it can be unclear on which side of the car cyclists are supposed to ride.



Sharrows do not provide enough space and can make travel challenging for cyclists who are not comfortable riding between parked cars and driving cars.

# 14% HAVE A BIKE AVAILABLE 2-4% USE THE BIKE IN DOWNTOWN

\*result from Demographic Survey 2008



The shared walking and bike path along Alaskan Way has numerous crossing lights. A bicycle route located on the waterfront side would create a less interrupted path and provide views for users.

#### **CLASH WITH PEDESTRIANS**



When bicycle facilities are poor or simply non-existent, cyclists resort to using sidewalks, which while legal in Seattle can create conflicts with pedestrians.





## THE WATERFRONT

Downtown Seattle is situated on the Puget Sound, yet the city hardly interacts with its waterfront. The waterfront is disconnected from downtown, and views of the water are blocked by the Viaduct in many places. Access routes to the water are unclear and uninviting in most cases. While conducting data collection along 1st Avenue, several tourists asked, "How do we get down to the water?" This demonstrates the lack of obvious invitations for access. There is only one place where those with disabilities can actually get to the waterfront from downtown without using an elevator.

Once at the waterfront, there are few recreational activities aside from the commercial spaces. Parks and public spaces along the water are generally run down and uninviting. Olympic Sculpture Park is a positive exception with numerous places to rest.

The promenade along the water has potential, but currently has heavy traffic volumes and high noise levels. The promenade has few inviting places to sit. The fence along the promenade makes it difficult to see the water for wheelchair users and others.

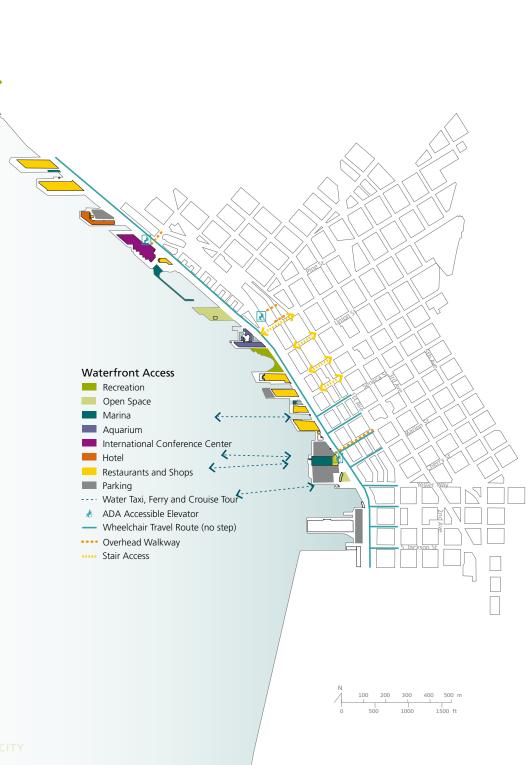
At the moment downtown is not taking advantage of it's spectacular natural setting.

#### SUMMARY

#### **DISCONNECTED**

Downtown is disconnected from its waterfront. The waterfront itself lacks invitations for public life and could become much more attractive.





#### **VIEWS**



The views of the water add quality to downtown streets and spaces.

While the Harbor Steps are an attractive place, it would be an even greater amenity to see the water.



The Viaduct takes away the good qualities from neighboring outdoor spaces, and impairs views to

the water.



It's important that elevators are safe, visible, and clean so people feel welcome and safe. The present elevators have room for improvement.

# THE WATERFRONT

The waterfront is one of Seattle's great amenities and should be treated as such in future planning and design.

There are currently four main issues that detract from the waterfront environment:

- · The traffic dominance of the Viaduct, the parking spaces and Alaskan Way. This will be discussed under the vehicular traffic theme.
- · Views toward the water are blocked or unattractive in most cases due to the Viaduct.
- · Access routes to the water are uninviting, unattractive, difficult to find and only a few are easily accessible for people with disabilities or people using strollers.
- · The waterfront activities are mostly commercial with few recreational opportunities.

#### **ACCESS**



Stairways and paths to the water are unattractive and take visitors along and under highway structures.



There are routes to the waterfront that are not inviting, where pedestrians must walk down unkempt stairways and past garbage dumpsters.

#### WATERFRONT



A majority of the existing activities along the water are commercial. The waterfront is in need of attractive non-commercial activities too.



When not in use for large summer events, this space space needs a sign for people to understand that it is a park. Other than the words on the sign, "This park is yours to enjoy...," there is little inviting about this space.



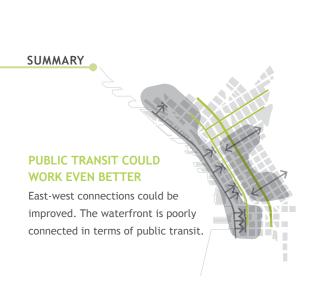
This is an example of what is offered for public seating. The espace is dominated by cars, which is not a good use of this setting by the water.

## **PUBLIC TRANSIT**

The predominant bus routes in the downtown run north-south. Prioritizing 3rd Avenue as a bus corridor is a way to organize public transit which works well, but more of a public transit network is needed in order accommodate all potential users. The public transit network should cover more than the most used avenues and streets; adding more buses on the east-west routes all the way from the waterfront and ferry docks up to I-5 and further into the neighborhoods to the east. To further strengthen the network one, or two, bus lines could be added on Western and 5th Avenues.

The waterfront is a poorly connected link in the transportation system. Connections between downtown and the water are very limited and few routes currently operate on the waterfront.

A unique and very positive feature in the downtown area is a ride free zone, which invites people to take public transit, accommodating wheelchairs, bicycles, trolleys and pets!





#### THE SYSTEM



The free downtown transit zone is a positive feature of the public transit system.

Being able to bring a bike on the bus is a good idea, since it makes it easier to use environmentally friendly transportation, even for longer distances.



The lift is a very positive feature for wheelchair users.

# WAITING FOR THE BUS



On a warm summer day it is comfortable to stand in the shade. But on all the rainy days in Seattle, standing under a shelter/roof would be preferable.



Many bus stops lack true seating which could make waiting more pleasant.

Activities and ground floor façades along 3<sup>rd</sup> Avenue are generally inactive and closed at night. This is one reason that it is not comfortable to wait for the bus after dark in some locations, which is a problem in terms of inviting more people to use public transit.

# **LEGIBILITY**



The entrance to the transit tunnel station is well integrated in the façade, but can be difficult to find if someone does not already know where it is.



The bus tunnel station in the Russell Plaza is hidden and tricky to find.



The transit tunnel station in International District/ Chinatown is easier to find. The entrances are located in a plaza with retail shops.

# **PUBLIC TRANSIT**

There are a number of positive features about the system and the buses today that should be retained in the future. The free downtown transit is a great feature. The buses also have lifts for people with disabilities and racks for transporting bicycles on the buses.

Waiting for the bus is an experience that could be improved. The lack of seating at bus stops on the avenues is a problem. Additional shelters or canopies at bus stops along the busiest routes would protect users from weather conditions. Bus stops on the east-west streets have the same problems, yet these places have the additional issue of entrances and exits of parking garages conflicting with bus stops.

The underground system is difficult to figure out at the street level, which is why signage and general legibility could be improved.

# KING STREET STATION

King Street Station is the largest transit hub in downtown. Various modes of public transport, such as Amtrak, the Sound Transit commuter train, local and regional buses, and light rail meet and connect people to local and regional destinations.

Legibility should be emphasized to orient people to these transit modes. The public transit on and around King Street Station must work well for both daily commuters and visitors.

Today the King Street Station area does not function as the optimal transport hub getting the users connected between transportation modes or into the city.

A number of important issues are not addressed:

# • Wayfinding: Getting from A to B

Do you immediately understand where you find the various means of public transit? Is it easy to understand what kind of public transit will take you to your destination?

# • A "Welcome to Seattle"

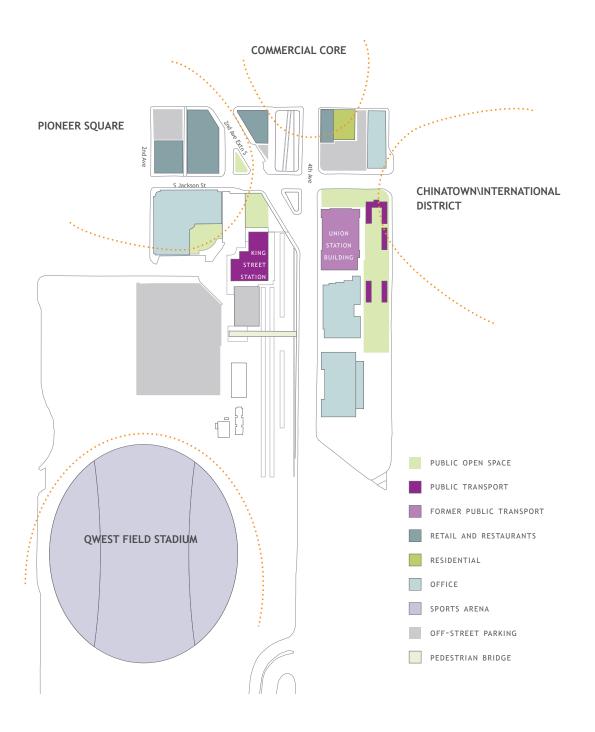
When you get out of the station do you experience being welcomed to Seattle? What is the immediate experience of Seattle as a city? Do you instinctively understand what routes will lead you to the center of the city and beyond?

#### Accessibility

A transit hub must address a number of situations. Is it easy to escort your elderly relatives to the station? Are there good facilities for quick drop off? Is it easy to get to and from if you are in a wheelchair or have special needs?

# • Waiting and passing through

If you have half an hour before the train leaves, are you offered convenient outdoor waiting facilities? Can you get a cup of coffee or sit on a public bench? How are the facilities if you travel with children?



#### **LEGIBILITY**



When approaching King Street Station, you experience the spaces around the station that prioritize vehicular traffic (e.g., signage relates to people in cars).

# **INVITATIONS**



This is the entrance and exit of the station as it is today. It does not offer a welcoming feeling or give the visitor the desire to return.



King Street Station is a clear and legible landmark. The adjacent, renovated Union Station building is impressive, appearing to be a train station although its use has changed. This can be confusing. Accentuate King Street Station and its public spaces as the main facility for Amtrak and Sounder commuter rail.



The bus stops outside the station are not an enjoyable place to sit and wait. Upgrade the experience of using public transit by making the waiting areas inviting.



Walking from King Street Station to the bus tunnel is confusing and hectic. It is not obvious which route will lead to the tunnel. Better visual and physical connection between the station and the tunnel is recommended.



that offers both commercial and public seats. The space is used by people waiting for public transport and people hanging out, creating a positive combination. The space invites you to sit and take a break.

# **ATTRACTIVENESS**



Currently, there is no entrance to King Street Station on the upper level. When future station upgrades are made, this open space should be emphasized to welcome visitors, and serve as an area to sit down comfortably and wait.



King Street Station may be seen from all angles, so it is important that the spaces around it are attractive.



The surrounding openings in the ground to the train tracks create barriers and lowers the quality of the open spaces due to visual lack of aesthetics, and air and noise pollution.

# KING STREET STATION

At a transportation hub, legibility is a key criteria to success. Public transit must be inviting for people to use. Invitation is the key. High quality open spaces at transportation hubs and waiting areas is necessary.

The legibility of the various means of public transit that meet at King Street Station is difficult. As a pedestrian it is not obvious where to go to reach your destination. Even the entrance to King Street Station is tricky to find with the current main entrance on the backside of the building.

The open spaces around King Street Station are lacking in quality, often without furniture or landscaping. These spaces are not a welcoming entrance for visitors to Seattle. However, the plaza behind Union Station with seats, benches, and landscape features has many of the qualities needed for inviting people to use public transportation. If the goal is for people to consider public transit as a viable alternative to the private car, then the rest of these spaces should be upgraded.

Legibility is not only about signage. It is about communicating hierarchy and relations in the way spaces are designed and organized. For instance, the relationship between King Street Station and the Union Station transit tunnel station could be stronger through streetscape design. Improved legibility of walking routes to the center of downtown and other nearby districts could better orient pedestrians.

SUMMARY

# THE STATION AREA DOES NOT WELCOME YOU

Legibility and accessibility needs improvement in order to become an optimal transportation hub. The waiting situations are not very attractive. The public open spaces around the station do not communicate "welcome" to Seattle.

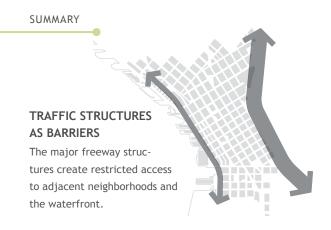
# TRAFFIC STRUCTURES

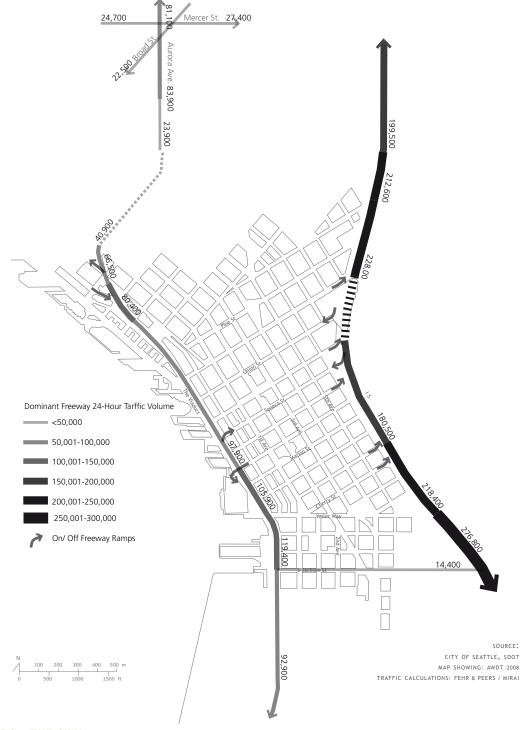
Two dominant traffic structures are pressuring downtown from east and west. Both structures are mainly open-air structures which causes severe problems.

The large traffic structures lower the quality of downtown because of their effects on adjacent public space and buildings (eg. air pollution, noise pollution, visual quality, and both physical and visual barrier effects).

Alaskan Way Viaduct blocks off downtown from its waterfront, resulting in low quality public space on the ground. The Viaduct will be taken down for safety reasons in the near future. The question is, what will replace it? Will this window of opportunity be used to create an integrated downtown and waterfront, where both places are winners in terms of low vehicular traffic flow?

Interstate 5 is another large traffic structure to the east of downtown creating a barrier between adjacent neighborhoods. The highway blocks east-west connections and creates an environment with high noise levels and pollution.





# **DOMINANT STRUCTURES**



I-5 creates a big scar in the city. It is very difficult, if not impossible, to create a high quality city fabric next to a large freeway.



The barrier effect of I-5 is tremendous. It separates neighborhoods and is a barrier both physically, visually, and in terms of noise and air pollution.



The Viaduct blocks views and creates a barrier between downtown and the waterfront. Downtown will never be integrated with the water as this structure remains.

# SPACE LEFT OVER - NO QUALITY SPACE



Left over space is difficult to use, which is why it ends up being used for parking.



Large traffic structures take up a lot of space. Pedestrians are forced to move under and along the Viaduct if they want to get to the waterfront.



surrounding buildings and spaces to activate the waterfront.

# **DESIGNED FOR CARS**

While Downtown seems to have turned its back to Interstate 5 there are a number of good qualities on the waterfront that draw people in that direction. At the moment the Alaskan Way Viaduct seems to be an even bigger problem than I-5 since it is a visual, physical and psychological barrier to something people instinctively gravitate toward: the water.

Large highway structures create challenges on many scales and levels. The first striking problem is the massiveness and dominance of the structures. A closer look at the structures reveals a number of unfortunate "side effects": odd, unpleasant, and unusable spaces are created below and beside the structures. The pedestrian environment becomes an undesirable place; pollution and noise forces pedestrians to walk through all the "low quality spaces" that were left over after the construction of the highways.

It is the pedestrians and the people in a city that have to bear all the negative side effects of these types of structures. This happens when we plan for cars and not for people.

# UNPLEASANT PEDESTRIAN ENVIRONMENT



This environment does not consider pedestrian needs.



An unpleasant environment along the water.



Highway infrastructure - access ramps - brings low quality structures into the downtown grid.

# SURFACE TRAFFIC VOLUMES

"Quality" has to do with multiple factors: safety, comfort, and the possibility for public life to take place. A rule of thumb; the more traffic and the higher the speed, the lower the quality for pedestrians and bicyclists.

A majority of the Avenues in downtown have traffic volumes (AWDT) above 10,000. Particular sections of an avenue may be busier than others, but in general the traffic volumes (AWDT) are high. 1st Avenue is an important pedestrian connection, but unfortunately it is also very busy in terms of traffic. Pine Street and Pike Street have fairly low traffic numbers, and may become pleasant walking routes.

East-west streets have less traffic. Unfortunately the topography and the less active ground floor frontages are a challenge for public life to take place.

Streets that connect to highway entrance or exit ramps have increased traffic volumes.



# **SUMMARY**

# HIGH VOLUMES RESULT IN LOW QUALITY

High traffic volumes and speeds in the downtown result in a low quality street environment for pedestrians and bicyclists.



# **STREETSCAPE**



This is a highway intersection, and not a place for people. The layout and design of the intersection gives priority to vehicular traffic only.

The space is undefined and too big and wide to have a comfortable pedestrian scale. The built fabric in this area is scattered, which does not define the streets with built edges. Constructing buildings up to the streets is a strategy to urbanize the area.



The current Mercer and Aurora intersection gives no room for bicyclists.

# **INVITATIONS**



This bench is placed next to a bus stop, but it cannot be called an inviting place to wait for the bus or take a break.

# PIOLET MANA

Some pedestrians must use the underpass to access the bus stop. This bus stop is placed on a difficult to access traffic island (see photo above). With fast moving cars there is little to protect pedestrians when crossing the street. Access for the disabled is limited.



Fast moving cars and a narrow sidewalk provide little protection for pedestrians.

# MERCER ST & AURORA AVE

The Mercer Street and Aurora Avenue intersection is located just to the north of downtown. Several neighborhoods and recreational destinations converge in this area. The Seattle Center and South Lake Union are both within walking distance from the intersection. The newly renovated South Lake Union Park offers access to the lake front.

The intersection is complicated with streets running under each other. Aurora Avenue is on the surface level. Mercer Street runs under Aurora Avenue and Broad Street again runs under Mercer Street. The pedestrian environment is very poor as people are forced to take long detours to cross streets, few places to rest or sit and the streetscape is uninviting, dull, and lacks human scale. The layout of the intersection as it is now makes it difficult to create a high quality neighborhood inviting people to walk and bicycle.

The Seattle Department of Transportation completed the South Lake Union Transportation Study in 2004 that recommends improvements for this intersection and others in South Lake Union. The Mercer Corridor Project that will reconfigure this intersection and other portions of Mercer Way in South Lake Union is partially funded and about to begin consruction.

# **ATTRACTIVITY**



People want to move around in attractive spaces. They are even willing to walk down the stairs, and decorate the wall with flowers.



The façades around Mercer and Aurora illustrate that streets facing heavy traffic arterials do not inspire opening façades to the street. On the contrary, business owners and residents attempt to block out as much of the noise and pollution as possible by closing façades.

This lowers the pedestrian quality drastically as there are few "eyes on the street" from adjacent buildings.



# UNATTRACTIVE INTERSECTION

Today the traffic intersection leaves no quality for pedestrians and bicycling is not an option. The area around Mercer St and Aurora Ave is scattered and the street scapes are dissolved and undefined.



SUMMARY

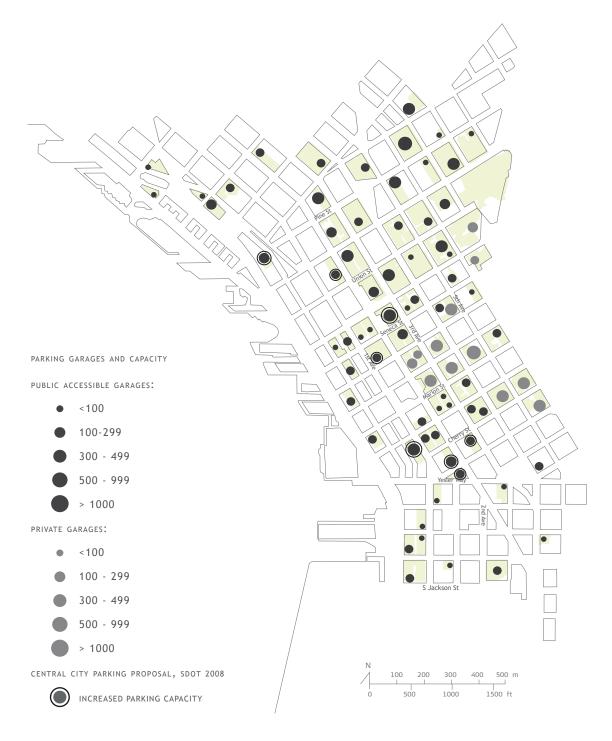
# **MULTI-STORY PARKING**

Multi-story parking garages are generally a good way of reducing and relocating surface parking lots, thus potentially making surface space for public amenities. The more parking accommodated in garages, the fewer surface parking lots should be found.

Seattle seems to be doing well with integrating parking garages into the built environment. But parking garages also involve a set of challenges. First of all, how do these parking garages meet the public realm. In several cases the parking garages are tall buildings that only communicate "parking garage" to the street. This gives a poor impression when analyzing the quality of a streetscape and subtracts from the feeling of safety at night.

Another question is, how is the ground floor organized? When you walk along it, do you look in on parked cars? Unfortunately the ground floors of the garages contribute to a poor pedestrian environment. In some cases the very wide entrances/exits create unpleasant "holes" in the façade. Finally, conflicts may occur when cars drive across the sidewalk to enter or exit a parking garage. This situation ought to be designed with the pedestrian in mind to minimize conflicts. Locating access from existing alleys is a better solution.

# CONCENTRATED IN THE EASTERN PART Multi-story parking garages may be an efficient way to take parking off downtown streets, but in many cases parking garages meet the public realm in an unattractive way.



# DOWNTOWN SURFACE PARKING EXISTING ON-STREET PARKING OFF-STREET SURFACE PARKING LOTS (<140) TOTAL: 2064 PARKING SPACES PARKING UNDER VIADUCT CENTER CITY ACCESS STRATEGY, SDOT 2008 PROPOSED ADDITIONAL ON-STREET PARKING INCREASED PARKING CAPACITY IN OFF-STREET PARKING LOTS SOURCE: CITY OF SEATTLE, SDOT CENTRAL PARKING PROPOSAL, SDOT 03/2008

# SURFACE PARKING

Off-street surface parking lots in a city center area may be functional, but unattractive. In downtown the surface parking spaces are generally run down and even less attractive when filled with cars. These spaces have potential for much more than parked cars. They may be transformed into interesting open spaces or buildings that add quality to downtown.

On-street parking is generally kept at a low level in downtown. For this reason, proposed additional onstreet parking is not recommended. Many leading cities around the world are creating strategies to reduce as much surface parking as possible - on-street as well as off-street.

On-street parking is currently placed next to the sidewalk which creates possible conflicts when combined with bicycles. Best practice examples from Copenhagen and Amsterdam allow bicycles to ride between the sidewalk and parked cars, rather than between parked and driving cars.

Today surface parking is concentrated in some areas. Reducing the amount of surface parking will help to improve the urban quality of Downtown.



# **COLLISIONS**

This map illustrates pedestrian and bicycles collisions with vehicular traffic. More pedestrian collisions occur at intersections than mid-block, while the number of bike collisions are about the same for mid-block and intersection collisions.

Most bike collisions occurred while the bicyclist was riding with traffic (55%) or entering or crossing traffic (30%). Although 64% of the bike accidents occurred while the bicyclist was riding in the roadway, 12% of collisions including one fatality occurred on "bike routes" including painted bike lines.

531 COLLISIONS WITH PEDESTRIANS IN 2007
354 COLLISIONS WITH BICYCLISTS IN 2007\*

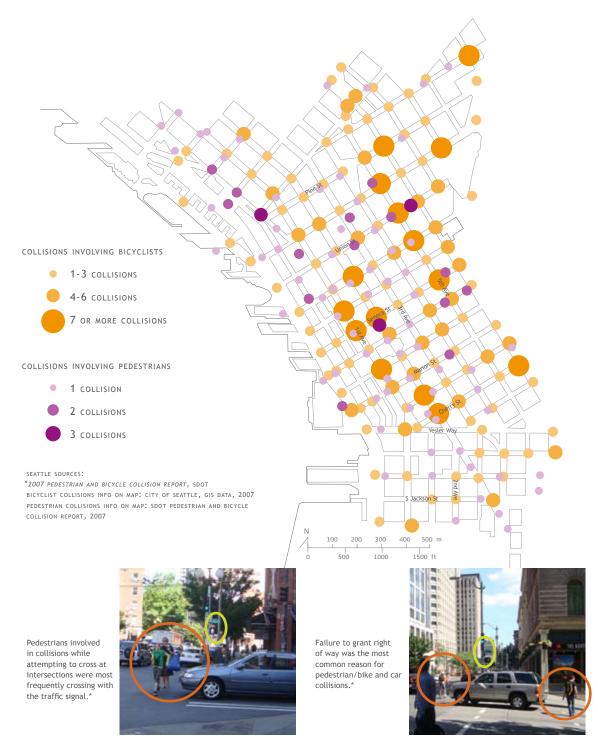
The many bicycle accidents (in the perspective of how few are bicycling) points at an incomplete and challenging bicycle network within downtown. Intersections still demand extra awareness from everybody. Note that 51% of the pedestrian collisions were while crossing at an intersection with signal.



# HIGH NUMBERS OF COLLISIONS

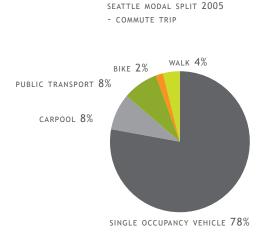
The number of accidents involving pedestrians and bicyclists are high compared with Copenhagen. Especially for the bicyclists since so few actually bike in Seattle.

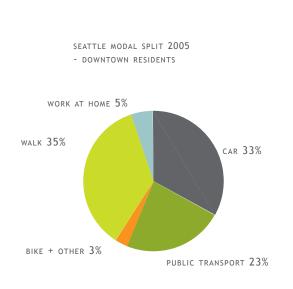


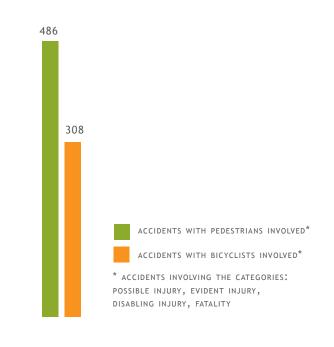


# **COMPARED WITH COPENHAGEN**

# **SEATTLE**







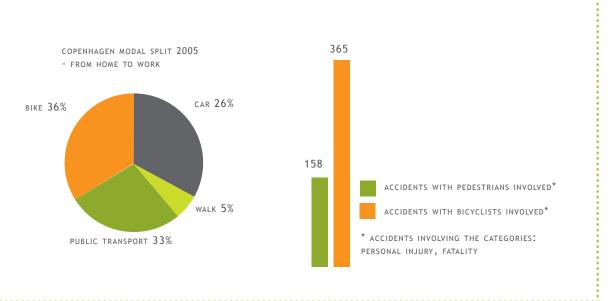
# COMPARING WITH COPENHAGEN

36% commute to and from work on bicycle. The number is based on an interview survey in 2005. An on spot survey was also conducted in 2005. On selected counting spots through out Copenhagen, more than 250,000 bicyclists were registered daily.

The number of accidents yearly with bicyclists involved are a bit higher than in Seattle. But when the number of people bicycling is far higher in Copenhagen, therefore the percentage of accidents with bicyclists involved are far lower in Copenhagen than in Seattle.

COPENHAGEN SOURCES:

TRAFIKSIKKERHEDSPLAN FOR KØBENHAVN 2006 (TRAFFIC SAFETY PLAN FOR COPENHAGEN 2006) VEJ & PARK, COPENHAGEN MUNICIPALITY, WWW.VEJPARK.KK.DK





# Protection against traffic & accidents - feeling safe

- Protection for pedestrians
- · Eliminating fear of traffic

#### Protection against crime & violence - feeling secure

- · Lively public realm
- · Eyes on the street
- Overlapping functions day and night
  - · Good lighting

# Protection against unpleasant sensory experiences

- · Wind / rain / snow
  - · Cold / heat
- · Dust / noise / glare
  - Pollution

# Opportunities for walking

- · Room for walking
- · Interesting facades
  - · No obstacles
- Accessibility for everyone
  - · Good surfaces

# Opportunities to stand/ stay

- Edge effect / attractive zones for standing / staying
- Supports for standing
- Facades with good details that invite staying

# Opportunities to sit

- · Zones for sitting
- Utilizing advantages;
   view, sun and people
- · Good places to sit
- · Benches for resting

# Opportunities to see

- Reasonable viewing distances
- · Unhindered views
- · Interesting views
- · Lighting (when dark)

# Opportunities to talk and listen

- · Low noise levels
- Street furniture that provides "talkscapes"

# Opportunities for play and exercise

- · Physical activity, exercise
- · Play and entertainment
- · In summer and winter
- · By day and night

# Human scale

· Buildings and spaces designed to human scale

# Opportunities to enjoy the positive aspects of climate

- · Sun / shade
- · Heat / coolness
- · Shelter from wind / breeze

# Positive sensory experience

- Good design and detailing
- · Good materials
- · Trees / plants / water
  - · Fine views

# Part of public space network

- Connected to pedestrian flows, destinations, functions and other public spaces
  - · Easily accessible

# Part of public space hierarchy

- Strong identity
   Understanding of character local, district or city
  - Reflect intended use

#### Sense of place

- · Relation to context
- Respect for historic aspects
  - · Genius loci

# INTRODUCTION

# QUALITY CRITERIA

Attractive public spaces provide room for optional and social activities. How is it possible to transform the vision for an attractive and inviting public realm into actual physical spaces?

Analyses of existing well functioning public spaces throughout the world show that they share common characteristics. Gehl Architects has categorized and summarized these characteristics in the "Quality Criteria" on this page, described under the headlines "protection," "comfort," "delight" and "place."

Public spaces must be inviting, attractive, and provide room for recreation, pleasure, exercise, and play. They must act as urban meeting places and be able to attract and welcome a broad variety of people; children, teenagers, adults, the elderly, and people with disabilities.

If public spaces are very attractive one can, in fine weather, expect necessary, optional, and social activities to take place - and expect people to spend more time in those spaces.

Good public spaces reflect the majority, if not all, of the 15 quality criteria. As such the list of criteria provides a good design checklist.

In the following analysis these quality criteria have been the tool and method used to categorize the quality of the public spaces. A "ticking off" of the 15 criteria is reflected in three categories:

Good quality = 11-15

Average quality = 6-11

Poor quality = 1-5

# **CITY FIGURE GROUNDS**

# THE TALL DOWNTOWN

Seattle has an iconic skyline that, along with the Cascade Mountain Range to the east, the Olympic Mountain Range to the west, Mount Rainier to the south and the Space Needle to the north, defines the city's visual identity.

Seattle's downtown skyline developed during the 20th century with a boom in the construction of high rise buildings of 20+ stories in the 1970s and 1980s.

The concentration of tall buildings is mainly found between I-5 and 2nd Avenue, and between Union Street and Columbia Street.

Today many buildings in downtown are 20+ stories and current construction projects, as illustrated on the map to the right, are planned for between 20-40 stories in height.

Tall buildings allow for increased residential and commercial density in downtown. How tall buildings relate to the public realm depends partly on when they were designed and built. Impacts of tall buildings on the public realm include the wind tunnel effect and shading, especially during the fall and winter seasons.

# THE TALL DOWNTOWN Downtown is predominantly made up of tall buildings, which allows for higher density but also causes a wind tunnel effect and shading in some areas.



The Seattle skyline from Puget Sound.





Streetscapes with lack of human scale and few invitations to enjoy and interact are the most common experience in downtown





Human scaled streetscape: 1st Avenue Soutth in the Pioneer Square Historical District



A striking and varied mix of scale on 5th Avenue.



Invitations to sit on Occidental Avenue in the Pioneer Square Historic District

# **STREETSCAPE**

However iconic the skyline may be, the downtown topography combined with the built form creates some very challenging streetscapes, characters, and changing experiences when walking in downtown.

In many parts of the Commercial Core the walking experience is influenced by the ground floor frontages of tall buildings. Many of these ground floors lack transparency or smaller storefronts open directly onto the street. This condition diminishes the human scale of the public realm and visual stimulation for walkers. In addition, "invitations" to stop and linger in the streetscape are few.

Walking in the Pioneer Historic District has an almost Parisian feel; the buildings are human scaled, the boulevard layout of 1st Ave is lined with trees and the streets are pedestrian oriented. In this part of downtown one feels invited to walk, as well as stay and enjoy the streetscape, the squares, the history and the ambience.

# **OPEN SPACES**

Existing open spaces are distributed throughout much of downtown. However, a public space network connecting the spaces and the main pedestrian routes has not yet developed.

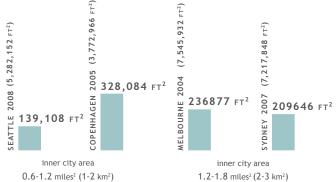
For example, the Olympic Sculpture Park is located in the north part of the waterfront. The park is very attractive and offers many opportunities for recreational activities. However, to get to the park you have to walk up to 3/4 of a mile along a part of the waterfront that has little street level activity and is oriented to vehicle movement. As a result, the Sculpture Park feels a bit disconnected from other public spaces.

In total, downtown has 456,390 square feet of public squares and public pedestrian priority streets. The only true pedestrian street in downtown is Occidental Avenue in Pioneer Square, with an approximate length of 490 ft.

# SUMMARY

# **OPEN SPACE NETWORK**

Downtown is in need of a public space network connecting streets and squares. The potential for an open space network to be developed lies in the existing open spaces distributed throughout the downtown area.



CAR FREE AREAS IN THE CITY CENTER OF COPENHAGEN



# THE STORY OF COPENHAGEN

Copenhagen has turned a car oriented city into a people oriented city in a step by step process over 40 years. The development has involved stopping the through traffic, reducing the number of car parking spaces in the center, and increasing the amount of space set aside for pedestrian activities

from 161,460 ft2, when the first pedestrian scheme was introduced in 1962, to the present day 1,076,400 ft2 of car free streets and squares. These streets and squares now form a coherent network of high quality walking links and public squares for recreation, all of individual quality and character.

# QUALITY OF OPEN SPACES ACCORDING TO THE QUALITY CRITERIA (P.49) GOOD QUALITY AVERAGE QUALITY POOR QUALITY



GOOD QUALITY Victor Steinbrueck Park has public benches and secondary seating, lawn, plus opportunities to enjoy good climate, views, and play.



AVERAGE QUALITY Waterfront Park has issues with feelings of safety at night, because of the surrounding concrete wall, making it hard to survey.



POOR QUALITY City Hall Park lacks proper seating and invitations to interact. It is overshadowed by adjacent buildings and appears unpleasant and uninviting.

# OPEN SPACE QUALITY

The central part of downtown has a fair amount of open space in the form of semi-private plazas. These plazas are privately owned with public access often limited to certain times of day.

In general all of the semi-private plazas are of good to average quality but add little variety to the public realm since they are all quite similar in size, function, and layout. Plazas are often adjunct spaces for office-focused buildings with little flexibility and restrictive rules for use and behavior.

Downtown has very few true public parks and three out of four of these currently deal with safety concerns due to a variety of reasons.

The actual public spaces tend to be of average to poor quality but have the potential to become the city's local meeting places, neighborhood squares and small pockets for families with children.

Despite the fair amount of open space there are no obvious gathering places for city celebrations or festivals, informal rendezvous or hanging out with a cup of coffee or tea.

# LOCATING THE GATHERING SPOTS Little in the way of gathering places or nodes connected by a public space network. The quality of public spaces varies. There is potential for some private and public spaces to become gathering spots.

# **ALLEYS**

The downtown grid, with blocks of 250 ft x 250 ft south of University Street and 260 ft x 400 ft north of University Street, has a secondary set of connections - north-south oriented alleys in almost half of the blocks. The total length of alleys is approximately14,500 ft.

Downtown alleys have the potential for strengthening the public realm and increased pedestrian invitations. Alleys in the Pioneer Square Historic District in particular are human scaled and have much potential for more active pedestrian use.

Today, around 85% of all the downtown alleys are treated as backsides, with closed facades, poor paving and inadequate lighting. Most alleys have functions that require vehicular access such as garbage collection, goods deliveries, and garage entry or exit gates and include trash dumpsters, ventilation shafts and air conditioning units.

Many of the downtown alleys are unattractive, underutilized and appear unsafe. The challenge will be to retain the utilitarian functions of alleys while providing improvements to accommodate pedestrian activity, retail and other uses.

# SUMMARY

# ALLEYS HAVE UNTAPPED POTENTIAL

- 15% of the alleys feel safe and have a good balance of uses
- 85% of the alleys lack activities and don't make people feel either comfortable or secure





# **GOOD QUALITY**







# **AVERAGE QUALITY**







# **POOR QUALITY**







# **ALLEYS**

- Alleys rated as "good quality" are ones which feel comfortable to walk through, are clean, and offer added attractions such as interesting public art, nice landscaping, store entrances, or cafés. They offer a unique, positive pedestrian experience.
- "Average quality" alleys may be fairly clean and relatively comfortable, yet function as little more than a drive-through street for service vehicles. There is nothing that invites pedestrians to pass through or stay in these spaces, even if they might reduce the time of a walking trip. However these alleys have the most potential for improvement to create more usable, welcoming spaces in the downtown.
- Alleys that qualify as "poor quality" appear neglected, dirty, and less comfortable. These spaces often have unattractive garbage disposal and collection facilities. The pavement in these alleys is in disrepair. Dark service entries, loud ventilation shafts, and insufficient drainage contribute to the low quality of the spaces. Pedestrians are often presented with unpleasant smells and sights, and generally stay away from these places, even if they offer short cuts. The Clear Alleys Program mandated the removal of dumpsters in the study area. This program was implemented in April, 2009. This, along with other efforts, could help poor quality alleys be improved for both pedestrians and utilitarian functions.

# **PUBLIC SEATING**

When inviting people to walk and enjoy the public realm it is important that different opportunities for pausing and resting are provided.

Downtown has approximately 1900 seats on public benches and movable chairs, which is on par with other cities. Unfortunately, they are all located in open spaces and not on streets and avenues. This leaves few benches for those who need to relax or pause for a short while when walking.

Due to the very steep topography in Seattle, it is crucial that opportunities to sit are provided in the streetscapes. This will help to encourage people to walk, enjoy, and spend time in the center city.

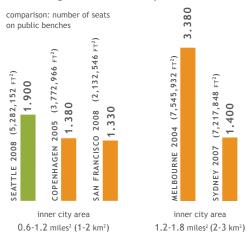
14% WOULD LIKE TO BE ABLE TO SIT
AND RELAX IN DOWNTOWN, BUT LACK
THE OPPORTUNITIES

\*result from Demographic Survey 2008

# SUMMARY

# MORE SEATING NEEDED IN THE STREETSCAPE

Public seating is plentiful in parks and squares. Little seating is located on streets. In general seating could be improved throughout the center city.





**PAUSING ON A STREET?** There is no seating along the sidewalk so these people sit on walls.

**TIRED FROM WALKING?** There is no seating on the sidewalk so this person uses a planter to rest from his walk..

# NUMBER OF SEATS AT OUTDOOR CAFES IN STUDY AREA - 1-10 SEATS 11-30 SEATS 31-50 SEATS 51-100 SEATS 100+ SEATS 1500 ft NICE OUTDOOR SERVING AREA Being able **OUTDOOR SERVING PARTITION** While city FENCING AS BARRIER This fence obscures

to enjoy the public realm is an important part of outdoor cafés; interacting and moving chairs around enhances the experience.

regulation requires a partition for businesses serving alcohol, this lessens the interaction with the street and the experience of the public interaction with the public realm. realm is somewhat compromised.

the view of the street and the enjoyment of watching city life is lost. It is a hindrance to

# **OUTDOOR CAFÉ SEATS**

The culture of outdoor café life has long existed in many countries around the world. This has significantly influenced the usage patterns of city centers. Drinking coffee is an uncomplicated way of combining several activities: being outdoors, enjoying pleasant views, and the ever present amusement of watching people pass

Seattle has a great coffee culture and there's a café or shop on almost every downtown corner. You can bring your own cup to your favorite place for coffee. But the step of "taking the culture to the public realm" has not yet fully developed. Drinking coffee is not associated with enjoying the public realm. The City has taken a big step recently by modifying the permit process for sidewalk seating, enabling an outdoor café culture to develop in the future.

SUMMARY

# NEED FOR MORE OUTDOOR CAFE SEATING

Seattle has fewer outdoor café seats compared to other cities surveyed. Most of the existing outdoor seating is in areas with many tourists such as Pike Place Market and the Waterfront.



# **GROUND FLOOR FRONTAGES**

The design of ground floor building frontages has a significant influence on the attractiveness of the public realm. They are the walls of the urban environment and contain the openings through which we see, hear, smell, and engage in the city's many-faceted palette of activities. On the ground floor and at eye-level we come into direct contact with the city.

Good ground floor frontages are active, rich in detail and exciting to walk by. They are interesting to look at, to touch, and to stand beside. High quality ground floor frontages create a welcoming sensation and encourage people to walk and stay in the city.

Other positive qualities include a high degree of transparency enabling interaction between activities inside the buildings and those occurring on the street. Also, frontages with many small units, many openings and a variety of functions make streets more diverse, stimulating and attractive. Frontages with small units also provide a predominantly vertical facade structure which has the important visual effect of making distances feel shorter.

In order to create an attractive, lively, and people friendly city, a high percentage of the ground floor frontages needs to be of high quality. A tool for evaluating ground floor frontages has been developed through previous Public Space & Public Life studies and is now used in many cities. The criteria presented on this page has been used in the evaluation of ground floor frontages in Seattle's downtown on the following page.



#### A ACTIVE

- Small units, many doors (15-20 units per 328 ft)
- · Diversity of functions
- · No closed or passive units
- · Interesting relief in frontages
- · Quality materials and refined details



# C SOMEWHERE IN-BETWEEN

- Mixture of small and larger units (6-10 units per 328 ft)
- · Some diversity of functions
- · Only a few closed or passive units
- Uninteresting design of frontages
- Somewhat poor detailing



#### E INACTIVE

- Large units with few or no doors
- No visible variation of function
- · Closed and passive frontages
- · Monotonous frontages
- · No details, nothing interesting to look at



# **B PLEASANT**

- Relatively small units (10-14 units per 328 ft)
- · Some diversity of functions
- Only a few closed or passive units
- Some relief in the frontages
- · Relatively good detailing



# D DULL

- Larger units with few doors (2-5 units per 328 ft)
- Little diversity of functions
- · Many closed units
- Predominantly unattractive frontages
- Few or no details



# F PARKING GARAGE STRUCTURE

- · Large units
- No attractive or engaging functions
- · Closed frontages
- Dark spaces creating a less comfortable feeling at night
- No details, nothing interesting to look at

# STREET FRONTAGE TYPES ACTIVE / PLEASANT SOMEWHERE IN BETWEEN / DULL INACTIVE / PARKING GARAGE STRUCTURE 1500 ft

# STREET FRONTAGES

Because of the steep downtown topography, north-south avenues tend to have more active façades with entrances and windows relating to the streetscape than the east-west streets. On the east-west streets, parking garages and internally focused uses on the ground floor result in inactive façades that relate poorly to the street.

WHEN WALKING THE HUMAN BRAIN NEEDS NEW STIMULUS FOR EVERY 30 FEET TO KEEP US INTERESTED AND ENGAGED\*

GEHL research

In general, downtown has few active and pleasant ground floor frontages. Most of the active frontages are located in clusters around the Pike Place Market, 1st Avenue South, Westlake Plaza and 5th Avenue.

The lack of active façades in downtown Seattle may influence people's willingness to walk, their feeling of safety - especially during night time - and the amount of time spent in the public realm.

# QUALITY OF FRONTAGES There are many dull to inactive ground floor frontages throughout downtown. Few ground floor frontages are active and pleasant. They are mostly located in three areas and on north-south avenues.

# STREET ELEMENTS

In general, downtown's accessible and fairly wide sidewalks form a good base for strengthening public life in the streetscape. The typical downtown sidewalk has a width of 12-15 ft and leaves space for natural pedestrian desire lines plus placement of urban furniture and street elements. Crowding on the sidewalks is in general not a problem in Seattle's center city.

Accessibility can be challenging in relation to bus stops where people walking by have to compete with bus shelters and waiting passengers. To avoid crowding in these situations bus shelters are gradually being replaced by overhead canopies integrated into building facades. Overhead canopies tend not to hinder transparency between ground floor spaces and streetscape so may also help create a more active streetscape.







SPACIOUS SIDEWALKS WITH GOOD ACCESSIBILITY. SPACE FOR A VARIETY OF STREET ELEMENTS AND URBAN FURNITURE.



**BUS SHELTER IN DESIRE LINE** Bus shelter placed in the middle of the pedestrian desire line.



WHEN NO ONE IS WAITING IT WORKS When no one is waiting for the bus there is enough walking width, but...



SIDEWALK IS BLOCKED When people crowd around bus stops, the sidewalk is blocked. The situation can be improved for both people waiting and walking.

# SUMMARY

# BETTER PLACEMENT & DESIGN OF STREET ELEMENTS COULD IMPROVE PEDESTRIAN ACCESSIBILITY

Careful organization of sidewalks can improve pedestrian accessibility, especially near public transit stops.



**SPACE CONSTRAINTS** A diagonal placed ramp is iused here to provide access in a tight space near utilities instead of matching the directinal ramp across the street.



**PATCHWORK PAVING** The large concrete surface of the sidewalk is difficult to maintain in an aesthetic way. Parking meter placed in pedestrian desire line.



WORN-OUT PATCHWORK PAVEMENT
Pavement of various types and styles that also is
poorly maintain does not leave the expression of a
high quality sidewalk.



PUBLIC BENCHES VARY IN QUALITY AND DESIGN These long benches are not pleasant to sit on and are not placed in a location that is lively or inviting.



Armrests at each end would make these benches more comfortable and inviting.



the backrest does not give proper support. Not



LIGHT POST Similar to privately placed crosswalk.



A stone bench is uncomfortable to sit on and inviting for the passerby.



newspaper boxes and A-board signs, mail boxes and lighting posts should be placed clear of the

# STREET FURNITURE

Several sections of the sidewalks are overcrowded with street furniture, and the bus shelters occupy a large share of sidewalk. In many cases the leftover space at the rear of bus shelters is too narrow for pedestrians passing through.

Commercial A-board signs and newspaper boxes are usually located on the streets with the most pedestrian traffic, but often in clusters of 6-10 at a time, causing obstacles for pedestrian movement.

A set of guidelines for placement, amount, and design of street elements and furniture could help the visual impression and the accessibility on the sidewalks.

Well designed and placed street furniture can provide a more coherent streetscape. If the street furniture is within the same design family, it is easier to establish an elegant, well functioning and comfortable experience for pedestrians. It can also be less expensive to maintain.



newspaper stand would make a more space efficient and elegant system for newspaper vending than the example illustrated above.

STREET LIGHT & COMMERCIAL A-BOARD

The coffee drinking man is a fun reference to the

"Hammering Man" located at the entrance to the

downtown Seattle Art Museum which has become

an icon for Seattle. Unfortunately here the added

A-board blocks pedestrian access.



COMMERCIAL A-BOARDS A-board signs

so they do not block street crossings.

create clullter and should be better regulated

BIKE RACK AND PARKING METER

The parking meter is slim and elegantly designed, but placed in a group with bike rack, lamppost, signs and newspaper stands. While not an elegant grouping, the sidewalk is not blocked.



BIKE RACK AND BIKES Bike racks are essential when wanting to invite people to use bicycles. Bikes and rack locations should be carefully considered so they do not block the sidewalk.

# SUMMARY

# **OUALITY OF STREET FURNITURE**

A high quality streetscape is due partially to how details are addressed. More attention could be givent to the quality and placement of street furnishings in downtown. Uncomfortable and poor quality seating tends to diminish opportunities for people to sit down.

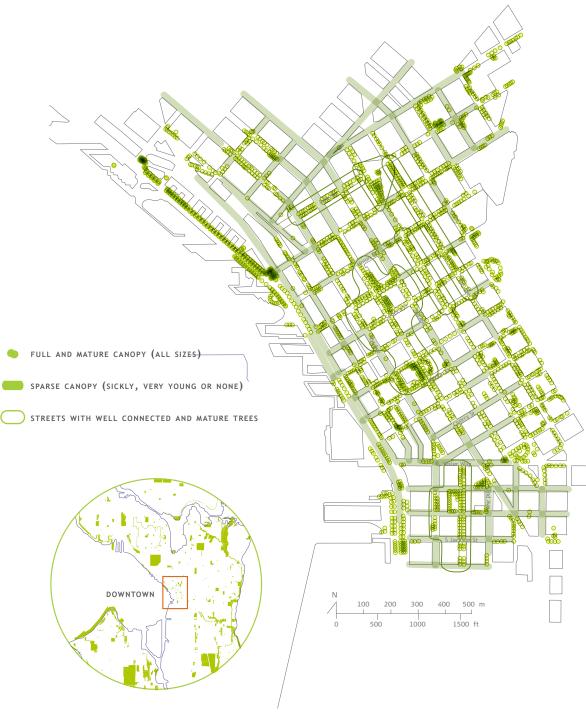
# **GREEN NETWORK**

The street trees and other vegetation in downtown function as a localized green infrastructure which is part of the larger "green" network of the city. Seattle's network of green space could be more cohesive especially in and around downtown.

Street trees and other vegetation substantially enhance the quality of urban spaces and the pedestrian experience. The downtown landscape is mostly defined by a hardscape consisting of stone, glass, concrete, high rise buildings, and paved surfaces. In some locations there is very little green to balance the hardscape.

There are gaps in the downtown green network especially along 1st, 2nd, 3rd, and 4th Avenues, parts of Pioneer Square and the northern study area. There are a number of streets with sporadic tree canopies as seen in the map to the right.

In parts of downtown, there are significant challenges to creating the green network especially where area ways under sidewalks make it difficult to place street trees.



# **SUMMARY**

# EXPANDING THE GREEN NETWORK

The green network within the study area could be developed further. Gaps in the network are indicated on the map in grey.

# **EXPAND OR INCREASE GREEN NETWORK**



Plantings provide some buffer to soften a harsh building-street interface and create a boundary between pedestrian and vehicular domains. The street would be further improved with larger trees.

The lack of street trees along some of Seattle's busiest streets create a place thatdoes not create a place that invites people to linger any longer than is necessary.



Certain places do not offer good growing conditions for street trees due to strong winds or lack of light or water. Often, small or sickly trees are indicators of places that are not pleasant for pedestrians.



Trees, shrubs and vines add delight to the downtown landscape, helping to build street character and identity.



Spaces around plantings in pocket parks or plazas become important social space. Trees offer supports and create appealing spaces to gather, wait or pause in conversation.

# **GREEN ELEMENTS**

The green network created by street trees varies widely in quality. The southern end of 1st Avenue and a section of 5th Avenue have thriving street tree corridors that give those streets a distinct character. Interesting tree grates contribute an artistic flare to the street plantings along 2nd Avenue, although many of those trees are not thriving due to poor growing conditions.

There are many new plantings throughout the downtown, particularly near newer buildings, but the ecological, architectural, and urban quality benefits of these trees are not yet evident. The current downtown green network has gaps and there are sections of the downtown that do not have any trees.

Other green elements could enhance the overall green network including green roofs, trellises, green walls, rain gardens and bio-swales. In downtown Seattle there are already some examples of alternative green elements and there is potential for many more applications of innovative greenery on buildings and in street designs.

#### SPATIAL OUALITIES



Street trees provide an important spatial transition between high rise buildings and the human scale of the street environment. Trees should be large enough or planted closely enough to be spatially effective.

# ALTERNATIVE PLANTINGS



There are many innovative ways to fit vegetation into the pedestrian environment. Green walls, trellises, and other streetscape vegetation give streets distinctive characters.



Missing links in the canopy due to poor growing conditions sometimes are patched using planters or hanging baskets. These are attractive but do not provide the same qualities for the pedestrian environment.



Building designed with ecological features often provide vegetation and landscape elements that benefit pedestrians, providing visual interest and a softer interface between buildings and the sidewalk space.

# **RAINWATER RUNOFF**

The waterfront adjacent to downtown, although welltrafficked with commercial and recreational vessels, is still ecologically important. The near-shore waters of Puget Sound are vital for juvenile salmon and organisms that support and prey upon them.

The most significant impact of the downtown hardscape for local hydrologic conditions is the amount of impervious surfaces and the resulting inability of rain water to percolate into the soil. Rain water flows rapidly off streets and sidewalks into drains carrying contaminants and suspended sediments. During 100-year storms, pipes carrying both sewer and storm water can be overwhelmed and volumes that cannot be managed by the treatment plant are discharged directly into Elliott Bay in a "combined sewer overflow" (CSO) event.

The challenge is to capture as much of the rainwater runoff as possible before it reaches Elliott Bay and Puget Sound. This suggests that streetscapes and public spaces be designed for more permeable yet urban surfaces that can absorb runoff.

# WATER IN THE DOWNTOWN OF SEATTLE AREAS THAT DRAIN STORM WATER TO A COMBINED SEWER LINER (ALL WATER IS TREATED AT A WASTEWATER TREAT-MENT PLANT UNLESS A CSO EVENT OCCURS, IN WHICH CASE STORM WATER AND SEWAGE ARE BOTH DISCHARGED TO PUGET SOUND, UNTREATED) AREAS THAT DO NOT DRAIN STORM WATER TO COMBINED SEWER LINES (STORM WATER IS DISCHARGED INTO PUGET SOUND, UNTREATED) STORM WATER DRAINAGE OUTFALLS O COMBINED SEWER OVERFLOW (CSO) OUTFALL BUILDINGS WITH EXISTING GREEN ROOFS Some buildings and landscape features use pervious surfaces -such as green roofs- or small bio-filtration cells -such as The steep east-west streets vegetated swales or rain with impervious surfaces gardens. complicates the rainwater run off problems. Green roof at 5th Ave. and Madison St.

# **SUMMARY**

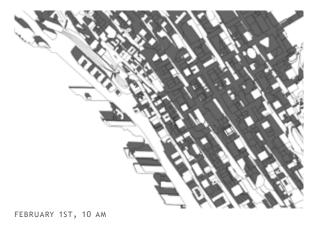
# **IMPERMEABLE SURFACES AFFECT WATER QUALITY**

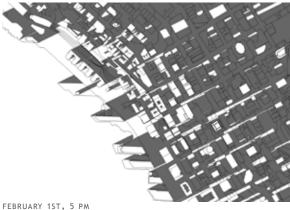
Pipes carry both sewer and storm water, and when overwhelmed during 100-year storms, water is discharged directly into Elliott Bay. Worth considering when designing streets, buildings and waterfront improvements.



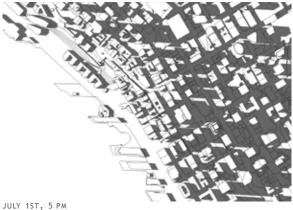
Columbia St.

# **SHADOW STUDY**









SOURCE: CITY OF SEATTLE PLANNING DEPARTMENT SHADOW STUDY, 2005

# **MICRO-CLIMATES**

People crave sun during Seattle's winter months and seek shade in the bright summer months. Due to the orientation of Seattle's streets and its location on a steep hill, some sides of the downtown streets see only a brief period of sun as it shines between buildings at high noon. Often the only sun can be found in the middle of the street. The north-south orientation of the street grid makes it difficult to create sun banks or pleasant south-facing walls where people can stop and linger along a warm, sunny wall.

With little sun reaching the street level, plazas and parks often remain unused except during lunch hours, and often feel abandoned. Even streets with major transportation facilities or tourist destinations lack protected places with positive microclimates. It is often difficult to find shelter from wind and rain, or relief from the heat and glare generated by large amounts of pavement.

Winds sweep along Seattle's straight streets and height differences between skyscrapers and lower buildings exacerbate air turbulence. Street trees help to block strong winds, but in some areas it is difficult for even hardy street trees to thrive.

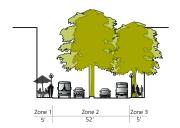


# **FIRST AVENUE**

Historically 1st Avenue was the first avenue to be built in Seattle. When you ask people, 1st Avenue is considered to be the main street in Seattle. However, 1st Avenue has a quality unlike typical main streets found in other cities. The built environment and the activities along 1st Avenue have different characters, which creates a street with a varied urban pulse, and some challenges for a main street.

1st Avenue is a corridor that links many of Seattle's important downtown destinations including Belltown, Pike Place Market, Seattle Art Museum, Harbor Steps and Pioneer Square. The street is also lined with shops, cafés, and restaurants. All this activity creates the base for a main street. However, there is potential for more recreational activity along 1st Avenue.

A main street gives a city the opportunity to show the world how it wants to be perceived. The diverse character of 1st Avenue reflects the neighborhoods along its length that have developed uniquely over time. More main street qualities such as urban recreation (both commercial and public), high quality pavement, attractive façades, pedestrian amenities and connections to surrounding attractions could be developed in the future.



STREET PROFILE: 1ST AVENUE & S. WASHINGTON ST. SECTION A-A / 1:400

Zone 1: Average sidewalk width. Commercial furniture.

Zone 2: Vehicle right of way. 2 lanes travel north and 2 lanes travel south.

Zone 3: Average sidewalk width. Street trees and street furniture.



STREET PROFILE: 1ST AVENUE & UNIVERSITY ST. SECTION B-B / 1:400

Zone 1: Average sidewalk width.

Zone 2: Vehicle right of way. 3 lanes travel north and 2 lanes travel south. Onstreet parking at one side.

Zone 3: Average sidewalk width. Street trees and street furniture.



Zone 2: Vehicle right of way. 2 lanes travel north and 2 lanes travel south. Onstreet parking at one side.

Zone 3: Average sidewalk width. Street trees and commercial furniture.

# **STREETSCAPE**



Attractive human scaled streetscape with strong historic identity. The median with large trees gives distinct character. High priority for vehicular traffic.

# **INVITATIONS**



Invitations to stroll and look at the many small shops, but few invitations to sit down and rest.

#### **ATTRACTIVENESS**



The historic district has the potential to become more attractive for pedestrians. Upgrading the street (eg. paving and furniture) and adding benches would make this area be seen as a main street.



Urban and modern streetscape. Vehicular traffic dominance. Few small trees. The important destinations (Art Museum, Harbor Steps) could communicate more with the street. Active façades around Pike Place Market.



This part of 1st Ave needs more suitable benches to sit on. The secondary seating on the raised platform offer additional invitations to sit down. This area is in need of more active façades.



Focus on the many important destinations along 1st Ave. Let them be a part of the everyday recreational life in Seattle. For instance, the plaza at Seattle Art Museum ought to be a place where people hang out, drink a coffee and look at the newest outdoor sculpture. Today no one is there, and therefore the museum is not as big a part of the everyday life in Seattle as it could be.



Trees give human scale to the streetscape that otherwise is dominated by very high buildings that detract from the feeling of a main street.



More active and attractive façades would invite people to stroll. The addition of benches would also improve the invitations to rest along the street.



Corner buildings are important to invite people walking on the side streets onto 1st Ave. There are already many good examples of inviting corners, but actually all corners along 1st Ave ought to have open and active ground floors.

# **FIRST AVENUE**

For 1st Avenue to evolve further as a main street, three themes are worth looking into; streetscape, invitations and attractiveness.

The quality the streetscape affects the pedestrian experience. An exceptional pedestrian street communicates a sense of welcoming with active façades and intriguing activities. Important destinations and side streets leading to other places are marked along the route. This should all be communicated without the need to look at a map or ask for directions to a destination.

#### 1st Avenue:

- Streetscape: How is it organized? What character does it have? How is it spatially scaled?
- Invitations: What activities does the street invite pedestrians to do? Does it invite you to stroll? Do active façades makes the experience of walking along the street interesting? Are you invited to sit down and rest for awhile? Is it possible to sit conveniently at an outdoor cafe?
- Attractiveness: How attractive is the street? What experiences are you offered as a pedestrian? How is the quality of the physical elements (paving, furniture, planting, etc.) Does the street celebrate the destinations opening up to it?

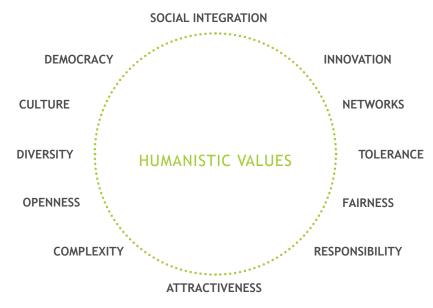
SUMMARY

# 1ST AVENUE AS THE MAIN STREET FOR SEATTLE'S CENTER CITY

1st Avenue has evolved into the main street for the center city. Improvements could help it become more attractive and inviting.







# **INTRODUCTION**

# SUSTAINABLE PUBLIC LIFE

A variety of factors must be taken into account when developing a sustainable public life; namely, the social, economic and environmental aspects of sustainability.

Sustainability, in people terms, relates to basic principles as assembling and integrating many activities and users in the same area; and reinforcing conditions for walking, cycling and long term, high quality-of-life in an urban area.

In city terms however, it is important to consider proximity as well as density. High density does not necessarily result in a more livable city. Tower blocks built with no consideration for life at ground level or movement between neighborhoods provide examples of how not to approach the issue of density.

Any function must be evaluated in terms of its contribution to the surroundings. For example, activating the street frontages with cafés, open shops, cultural institutions or other activities, will invite dialogue with the immediate surroundings and create social opportunities. A city or a neighborhood developed with an emphasis on proximity will provide better living conditions in terms of social awareness and responsibility.

#### **HUMANISTIC VALUES**

Social sustainability can be measured against a check list of humanistic values, when looking at the city and its spaces.

# **MAJOR DESTINATIONS**

Seattle's destinations are scattered around downtown, and that creates the need for a strong network. Large parts of downtown - the central part in particular - have few destinations. This creates a gap, and makes it difficult for downtown to function as an organism.

The positive aspects of the way the destinations are spread out is that they may act as fixed points for a future network. It is easier to create a strong network if there are a number of popular destinations to connect. For instance, 1st Ave, the waterfront, and the important destinations along Pine St and Pike St.

If the goal is to create a lively city, some destinations will take priority over others. Destinations that people are eager to visit often are strong generators in a network, while destinations one only visits once or twice year are of less importance. Seattle is not a concentric city, and therefore downtown should not only have one center. It may make more sense in downtown to operate with several nodes.

# **SUMMARY**

# SCATTERED DESTINATIONS

Today the destinations are scattered in downtown, but in the future they may act as a base for the pedestrian network. Some areas have too few destinations (highlighted with grey).





# $\geq$ FUNCTIONS AND SERVICES IN DOWNTOWN GROCERY STORE SOCIAL SERVICE DAY-CARE CENTER EDUCATIONAL INSTITUTION LIBRARY THEATER HOSPITAL COMMUNITY CENTER CHURCH HOUSING HISTORIC AREA SHOPPING & HOTELS COMMERCIAL WATERFRONT MUNICIPAL & CORPORATE OFFICES STADIUMS & TRANSIT STATIONS 100 300 500 m INDUSTRY & HARBOUR 1500 ft 500 1000

# **FUNCTIONS**

Downtown is divided into a number of areas, each with a special character or function.

The current challenge is that the areas tend to be dominated by single purpose activities - some more than others. The large office and governmental areas may have activities during weekdays, before and after business hours and during the lunch break, but the rest of the time, especially evenings and weekends, it is underutilized.

Commercial areas will be active during business hours, but will be without much life on evenings and Sundays.

One significant problem is that few people live in downtown. Dwellings have the positive effect of generating life at the times when other functions are closed. This can create a more lively city throughout the day, the week, and the year.

Overall, downtown would gain from more mixed uses. All areas would benefit to have a little of everything, even though there still should be concentrations of commercial activities for instance, in order to get downtown to function well.

SUMMARY

# THE "WORKING" DOWNTOWN

The various areas in downtown tend to have a single focus. Downtown is primarily office and retail focused with few people making downtown their home.

# **EVENING ACTIVITIES**

The number of evening activities and their locations are important factors for the vitality of the city and the perception of safety. If there are few activities, people perceive a deserted city and avoid going there, especially in the evening.

This map shows establishments that are open on a normal weekday evening in June. There is a concentration of evening activities along 1st Avenue and near the major hotels. But in the rest of downtown, one is very likely to feel alone with such little activity. For example: when waiting for the bus on 3rd Avenue, people would feel more safe if shops and restaurants were open, so there was some alternate activities.

Places that lack evening activities are the waterfront, Western, 2nd, 3rd, 5th, and parts of 4th Avenues and almost all the east-west streets.

69.4% FEEL UNSAFE IN DOWNTOWN AT NIGHT

\*result from Demographic Survey 2008

**SUMMARY** 

# EVENING ACTIVITIES IN FEW AREAS ONLY

The lack of evening activities in downtown fails to keep the city active at night and adds to feeling unsafe at night. Areas in dark gray on the map have a lack of evening activities.





### 8% 16% **EVENING SAFETY** RESPONDENTS IN DEMOGRAPHIC SURVEY FEEL UNCOMFORTABLE IN THESE AREAS OVERALL CLOSED STREET FRONTAGES DIM LIGHTING TOO BRIGHT LIGHTING EXPERIENCED AS UNCOMFORTABLE AT NIGHT 1500 ft

### **FEELING OF SAFETY**

Security is an important factor for the development of public life. People need to feel comfortable during the day and the night to keep visiting downtown and to bring their children. Experienced and real security might not be the same phenomena, so making streets feel comfortable has much to do with creating a friendly environment that people find inviting.

From the demographic survey it was noted that almost 50% of the respondents feel ucomfortable in downtown, in different places and at different times, but mostly in the evening. The lack of activities, residents in downtown, dark alleys, areas with closed facades and poor lighting aggravate this feeling.

3rd Avenue in particular, has issues with lacking comfort and invitations. This needs to be addressed as 3rd Avenue is the public transit corridor and this perception may be keeping people from using public transport.



### **ART & HISTORY**

Public art, water fountains, and historic sites may increase the quality of being in a city. Billboards and large signs can have an impact on visual quality.

Public art is spread out in most of downtown. Though public art seems to get a little bit thin at the edges of the downtown area.

Apart from Harbor Steps and Benaroya Hall, most fountains (public or private) are placed in the office and governmental area.

Billboards and large signs are found in various places but there seems to be a concentration around 1st and 4th Avenues.

The southern part of downtown has the highest concentration of historic buildings and spaces. The historic districts ought to be celebrated in a way so everybody in Seattle is proud of them and wants to spend time there.

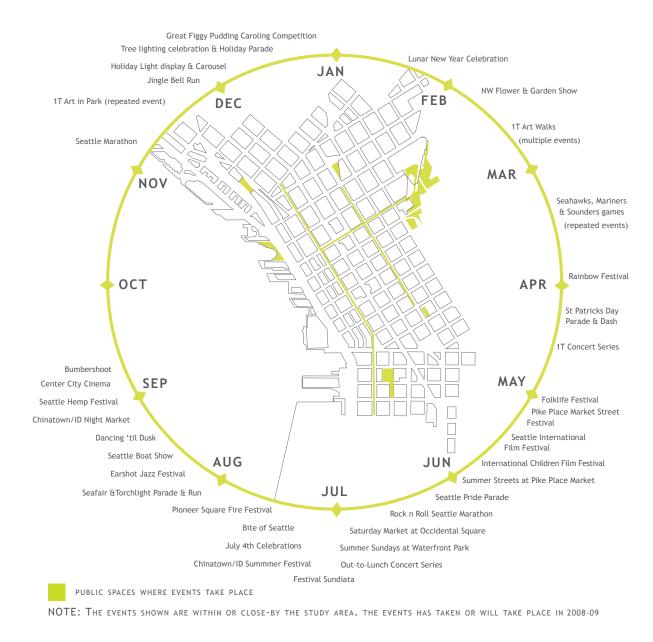
### SUMMARY

### IN REASONABLE BALANCE

Most of downtown seems to have art pieces though the edge of downtown seem under prioritized. The historic districts and elements in downtown ought to be celebrated even more.



### **EVENTS THROUGH OUT THE YEAR**



### **CULTURAL ACTIVITIES**

The majority of events take place in spring and summer. Having more events spread throughout the whole year would be beneficial. All events do not have to be big. Many smaller events scattered throughout downtown would also have a positive effect. Autumn, spring and winter may have smaller and less expensive events.

Many small events supplementing the larger ones would also make it possible to include more of the public spaces in downtown.

A broader variety of events in downtown would invite many different user and age groups with different interests. For instance; skating festival, sing-along festival, fashion week, Seattle by night (lighting festival in public spaces), flea markets, historic walks in downtown, art festival for children etc.

The positive aspect of events is that they gather a lot of people, which adds life and bustle to the whole area in which they take place. Once people are in downtown for an event, they may have lunch, shop, or go for a coffee.





### **INTRODUCTION**

### **PUBLIC LIFE SURVEYS**

The purpose of the Public Life Survey is to examine how public spaces are used. It provides information on where people walk and stay either as part of their daily activities or for recreational purposes. This can form the basis for future decisions, about which streets and routes to improve, and how to make them easy and pleasant places to visit, not simply traffic conduits.

The study also provides information on how and where people sit, stand, or engage in other stationary activities in the city. These stationary activities are good indicators of the quality of the urban spaces. A large number of pedestrians walking in the city does not necessarily indicate a high level of quality. However, a high number of people choosing to spend time in the city indicates a lively city with strong urban quality.

The demographic survey illustrates who uses the city, how they use and experience the city, and what modes of transportation they use to get there.

### 3 TYPES OF SURVEYS CONDUCTED

Gehl Architects has performed 3 types of surveys in collaboration with students from the University of Washington:

- 1. Counting pedestrian traffic
- 2. Stationary activity survey (behavioral mapping)
- 3. Demographic survey (questionnaires)



### SUMMER WEEKDAY

Most pedestrians are on shopping streets and the busiest areas in downtown Seattle are Westlake Park and around Pike Place Market.

### 3RD AVENUE IS THE BUSIEST AVENUE

A comparison of the avenues reveals that 3rd Ave is busiest, especially around Pike Street. 1st Ave is also a popular route and busy all the way from Pike Place Market down to Pioneer Square.

### PINE STREET IS THE BUSIEST STREET

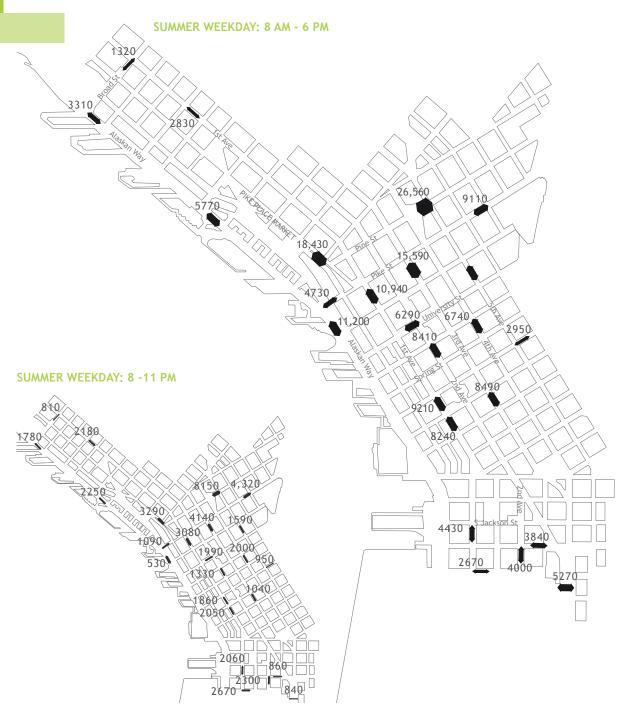
Pine Street is the busiest of the counted streets. Pike Street is also busy, but only carries 1/3 the amount of pedestrians as Pine Street. Madison Street has only 1/10 of the pedestrians found on Pine Street.

### LOW LEVEL OF EVENING TRAFFIC

Pedestrian numbers drop dramatically when shops and offices close down. Large sections of downtown become more or less deserted. Only the area around Westlake Park experiences a fair number of pedestrians.



Highest pedestrian volumes in shopping areas and along the transit corridor on 3rd Ave. Numbers drop dramatically after business hours.



### SUMMER WEEKEND

### **CHANGED USER PATTERNS ON SATURDAYS**

Pedestrian volumes double in some areas, while decreasing dramatically in others.

### **COMMERCIAL AREAS ARE BUSIER**

The areas around Westlake Park, Pike Place Market and Pike Street are busier on weekends. The waterfront also experiences an increase with 1/3 more pedestrians on a Saturday than on a weekday.

### 1ST AVENUE IS THE BUSIEST AVENUE

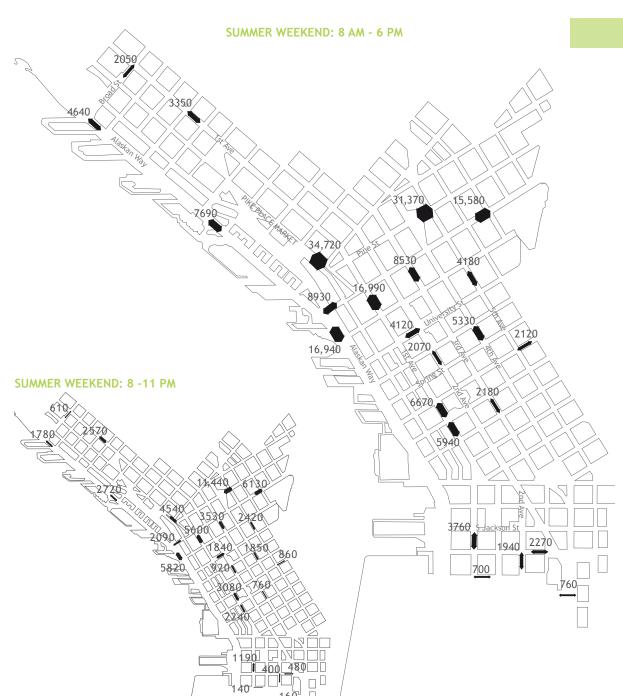
In general, 1st Avenue is the busiest avenue on weekends. But the use of the avenue changes. 1st Avenue has higher pedestrian numbers around Pike Street and in Belltown on a Saturday. But the number of pedestrians decreases in the southern end of the street compared with weekday numbers.

### A SMALL INCREASE IN PEDESTRIANS IN THE EVENING

There are more people in downtown on a Saturday evening than on a weekday, but the numbers are still very low. The busiest place is Westlake Park.



The commercial areas are busier on Saturdays but the office core is very quite. Parts of downtown are busier on Saturday evenings.



### WINTER WEEKDAY

### A REGULAR PATTERN OF USE

As in all cities, pedestrian numbers are lower in winter time compared to in the summer. Downtown is more evenly used during the winter.

### WESTLAKE PARK AND 3RD AVENUE ARE BUSIEST

Westlake Park is still the busiest place, but the difference between Westlake and the rest of the city is not as dramatic as in the summer. 3rd Ave is the second busiest area, probably due to very low numbers in Pike Place Market during the winter.

### THE WATERFRONT IS NOT USED

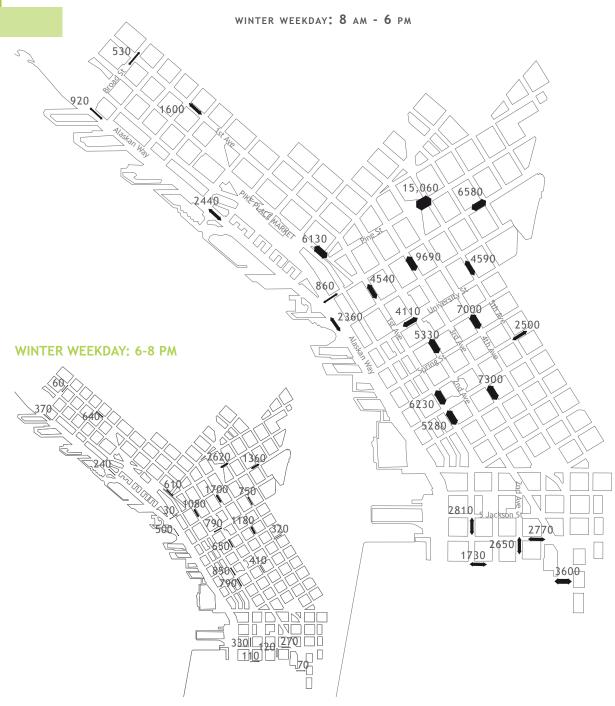
The waterfront is hardly used at all, and some of the lowest counts in downtown are found along the water.

### ALL OF DOWNTOWN IS QUIET IN THE EVENING

Downtown has extremely low pedestrian numbers in the evening. This helps explain why some people interviewed in the survey feel less safe at night. Not even Westlake Park is busy in the evening in the winter time.

# DAYTIME ACTIVITY EVENING ACTIVITY WESTLAKE PARK & 3RD AVENUE ARE THE BUSIEST PLACES

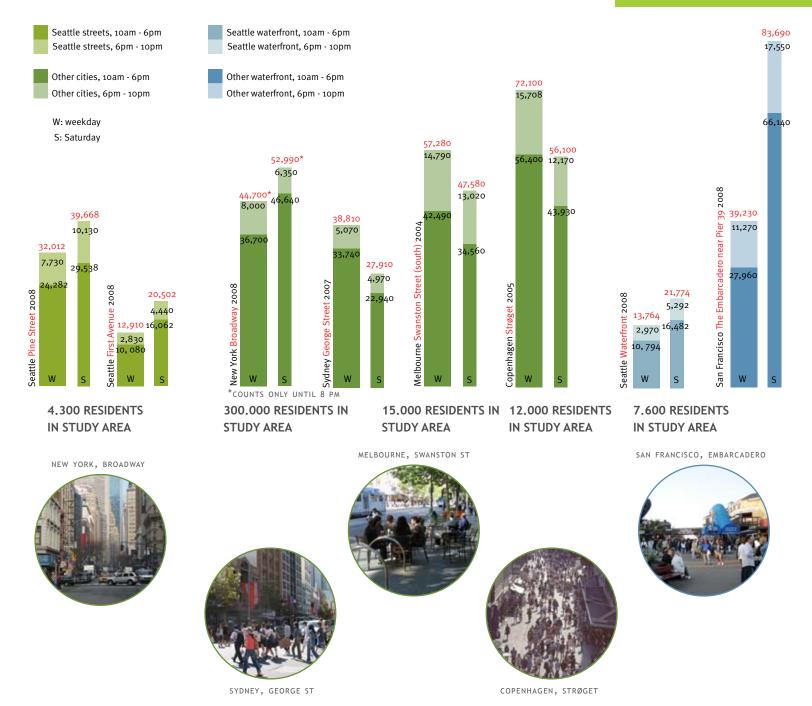
Lower numbers than in the summer. Pike Place Market is less visited, but Westlake Park is still busy. 3rd Ave is also a busy street. The waterfront is hardly used.



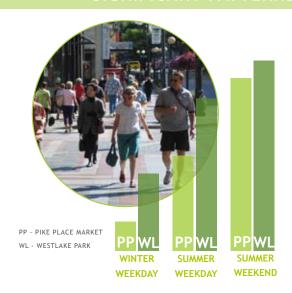
### PEDESTRIAN MOVEMENT ON SUMMER WEEKDAYS & SATURDAYS IN SELECTED CITIES

CITY COMPARISONS ALSO ILLUSTRA TED ON PAGE 17.

### **COMPARED WITH OTHER CITIES**



### SIGNIFICANT PATTERNS



Note: numbers covering both day and evening registrations

## PUBLIC

FROM WINTER TO SUMMER: + 223%

FROM WEEKDAY TO WEEKEND: +81%

Note: numbers covering both day and evening registrations



Note: numbers from a summer weekend 8am - 6pm

### **WESTLAKE PARK**

### - THE BUSIEST PLACE IN DOWNTOWN

Westlake Park is by far the busiest place in Seattle, at all times of the day, week, and year. The only place in Seattle with a similar amount of pedestrians is Pike Place Market. During the day on a summer weekend Pike Place Market actually attracts more pedestrians, but Westlake Park is busier if one considers the number of pedestrians for both day and evening activities.

Westlake Park is a multifunctional center where different types of flows and necessary and optional activities overlap.

It is a commercial center with adjacent offices, public transport, and a square for recreational purposes and events. Many other places in downtown Seattle have more limited use, and are often only busy on weekdays, in the summer, or other specific times.

### PIKE PLACE MARKET

### - A POPULAR DESTINATION

Pike Place Market has fairly high pedestrian numbers during the winter which increase by almost 223% during the summer. Likewise, the pedestrian traffic on a summer weekday increases by 81% on a summer weekend.

It is a place to shop, but also just to stroll, feel the atmosphere, and watch people. The dramatic increase from winter to summer, and from weekday to weekend indicates that this is a destination that attracts visitors in the city as well as people living in Seattle who go there for their weekend shopping.

### THE WATERFRONT

### - NOT A BUSY SUMMER DESTINATION

During winter the waterfront has some of the lowest registered pedestrian volumes. Volumes increase dramatically from winter to summer, but the pedestrian numbers in summer are still not remarkably high. Pedestrians are concentrated around the commercial piers south of the Waterfront Park.

On a nice, sunny summer weekend during the day the waterfront manages to attract only about half as many pedestrians as Pike Place Market and Westlake Center, and fewer pedestrians than 1st Avenue. But on a summer weekend during the evening, the waterfront is a fairly popular place compared with the rest of downtown.

The lower pedestrian volumes on the waterfront have something to do with the access to the water from the city, the activities people are invited to take part in, and the quality of the public spaces.



\*\* FROM WEEKDAY TO WEEKEND: -68%

\* between Pike & Union / \*\* between Marion & Columbia

PINE ST. IS THE BUSIEST STREET

MADISON ST CARRIES 90% LESS THAN PINE ST

4th Note: numbers covering both day and evening in weekend counts

12,550

3rd

060,

2nd

### **1ST AVENUE**

1st

### - THE BUSIEST AVENUE IN SUMMER

6,780

5th

1st Avenue is generally the busiest avenue during the summer, when people engage in more leisure activities and walk purely for enjoyment. People choose this route especially on a summer weekend. 1st Avenue is busiest near Pike Street. On a summer weekday, a part of 3rd Avenue is busier due to its function as a public transit corridor, but the same stretch is only half as busy as 1st Avenue during a summer weekend.

In the winter on an ordinary weekday during business hours, some of the other avenues have higher pedestrian volumes, probably due to the concentration of office buildings along these streets.

Note: numbers from a summer weekday and a summer weekend

### **3RD AVENUE**

### - BUSY STREET ON WEEKDAYS

3rd Avenue is the main public transport corridor in downtown, and therefore it naturally has high pedestrian volumes. Studying the patterns of pedestrian volumes on weekdays and weekends, it is clear that 3rd Avenue is used mainly for necessary activities during the week (eg., going to and from work). During the week 3rd Avenue is very busy. On weekends it is still busy but with a decrease in pedestrian numbers of 36% between Pike & Union and even 68% between Marion and Columbia. 3rd Avenue is consistently busy close to Pike Street, one of the busiest overall areas in downtown.

Note: percentages of traffic between 8am-8pm on summer weekday

### **PINE STREET**

### - THE BUSIEST STREET

Pine Street is the busiest of the counted streets. Pike Street is also busy but it only carries 1/3 of the amount of pedestrians found on Pine Street. In general, the steeper the topography, the fewer people choose to walk a given street. For instance, Madison Street (an east-west street with a steep hill) carries 90% less people than Pine Street.

Pine Street is probably the busiest street since it connects two of the city's important destinations: WestLake Park and Pike Place Market. Pine Street does not have the topography challenges that other streets in downtown have.

### STATIONARY ACTIVITIES

### FEW ACTIVE SPACES

A vibrant city does not necessarily have the same amount of public life everywhere. Less populated spaces are important for getting some peace.

The survey of the stationary activities illustrates how the public spaces are used. Surveying what people do in the spaces is important since the number of people in itself does not tell much about the public spaces. Surveying what people are doing indicates which public spaces people choose to spend their time.

For example, comparing a public space, where many people sit on benches and socialize, with another public space, where many people are waiting for the bus but not sitting on benches, suggests that the former is a space people like to be in and choose to spend time in.

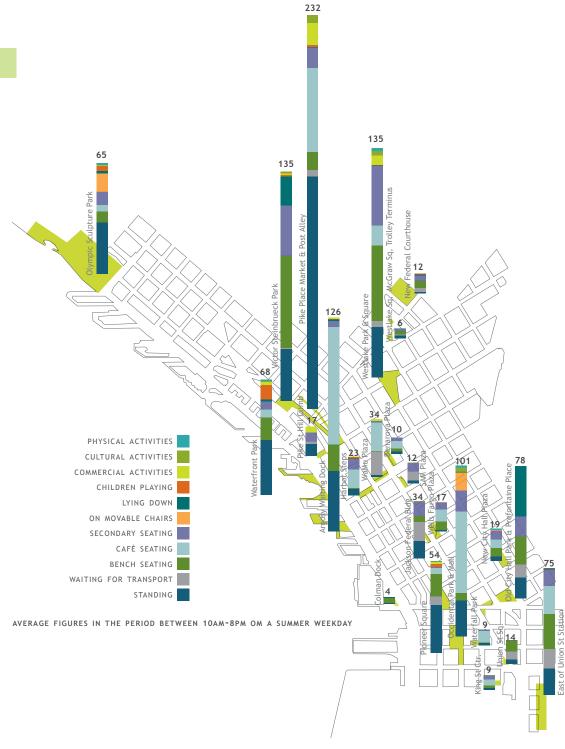
On a summer weekday in downtown, a few public spaces are very populated but most of the surveyed spaces do not have many visitors.

The popular public spaces are Pike Place Market, Post Alley, Victor Steinbrueck Park, Westlake Park, and the commercial area of the waterfront.

The moderately used spaces consist of the Olympic Sculpture Park, Occidental Park & Mall, east of Union Station, and City Hall Park.

The rest of the surveyed spaces in downtown are not frequently used.

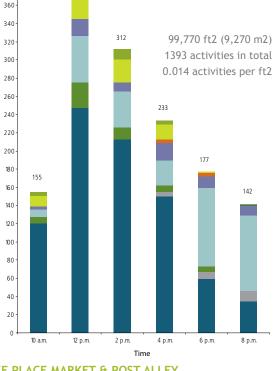
The general low number of people in the public spaces is not only influenced by the quality of the spaces (understood as Gehl Architects 12 Quality Criterias), but a number of factors may influence the use of the public spaces. In parts of downtown the numbers of pedestrians are fairly low, and that minimizes the potential user groups. The public spaces might be poorly connected with other activities in downtown or have few activities. If few people use the space, this will not attract a great number of people.

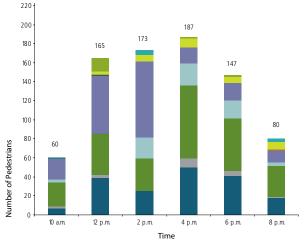


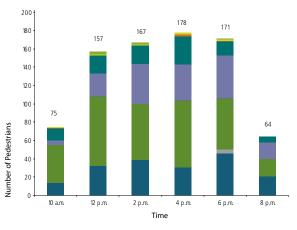
### **STATIONARY ACTIVITIES**











### PIKE PLACE MARKET & POST ALLEY

### - MANY PEOPLE STANDING

400

380

**Number of Pedestrians** 

374

Pike Place Market has the highest registered number of people engaging in stationary activities. A closer look at what people are doing characterizes the type of space. In Pike Place Market most of the stationary activities taking place are people standing: looking at goods, buying things or waiting for each other. Commercial activities and people sitting on café chairs are also notable activities. Of course many people are commercially active as they sell their goods at various market stalls.

Pike Place Market is also the space where many cultural activities are taking place in downtown, in terms of street performers and musicians.

### **WESTLAKE PARK**

### - MANY RECREATIONAL ACTIVITIES

Westlake Park also scores high with regards to the amount of people spending time in the space. Compared with Pike Place Market, Westlake Park is used more as a recreational space with many people sitting down. Many people sit on public benches while another large portion of people find seats on secondary seating opportunities. There are also people standing in the space, but far fewer than in Pike Place Market.

### **VICTOR STEINBRUECK PARK**

### - PEOPLE USE EVERY SQUARE FOOT

Victor Steinbrueck Park is much smaller than Westlake Park, yet the same amount of people spend time in the space. Therefore, it is perceived as a much more intensely used

In Steinbrueck Park every square foot of space is used: people sit on benches and on secondary seating and they sit and lie on the grass. Steinbrueck Park is unusual in downtown because of the lawn that is popular to lie and sit on.

On a good summer day, Victor Steinbrueck Park is shared by a variety of users, including people who may be homeless. Accessibility and equity are important to achieving a good balance of user groups in a space and making all people feel welcome.

### STATIONARY ACTIVITIES

### SIGNIFICANT PATTERNS



Note: percentage of all registered activities in all spaces

### **VERY LITTLE PHYSICAL ACTIVITY**

Only 19 people (0.25%) in total were observed doing physical activities throughout all the spaces studied, over a period of 9 hours. Physical activities as a category may include activities such as playing ball, skate boarding, taichi and others.

The people doing physical activities used one of the three following spaces: Olympic Sculpture Park, Waterfront Park and Westlake Park. Exercising is a substantial part of most people's lives, and physical activities contribute positively to the public life in public spaces. But if people are to be physically active in the public realm, there must be spaces that invite these types of activities.

While there are few recorded physical activities in the stationary locations, quite a few people use the northern path of Alaskan Way for jogging. This activity is registered under "pedestrian movement" in the Alaskan Way data.



LESS THAN 1 % ARE CHILDREN PLAYING

Note: percentage of all registered activities in all spaces

### HARDLY ANY CHILDREN PLAYING

Children playing are good indicators of a city that has been created for all users. Public spaces require extra features in order to invite children and elderly people to use and enjoy them.

Downtown Seattle does not have a public playground. A public space can also appeal to children and invite them to play even though it is not organized as a playground. Downtown spaces currently do not have this quality.

Children play in the Olympic Sculpture Park throughout the day, but only between 1-4 children can be found there at any given time.

Waterfront Park also has a few children playing (even fewer than in the Olympic Sculpture Park), although frequent groups of children in day camp or on school trips pass by.

Downtown still has a long way to go in order to become a more inviting place for families and children.



### PARKS BY THE WATER:

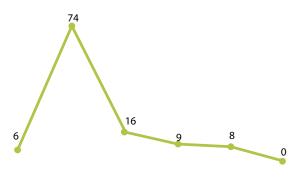
### **OLYMPIC SCULPTURE PARK & WATERFRONT PARK**

The Olympic Sculpture Park is fairly evenly used throughout the whole day. Waterfront Park is especially popular around noon. More people use the Olympic Sculpture Park for recreational purposes throughout the day than Waterfront Park.

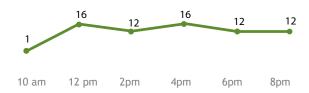
The moveable chairs seem popular in the Olympic Sculpture Park, but many people were observed standing in the Olympic Sculpture Park, a sizeable portion of which were waiting for long trains to pass by so they could cross the railroad tracks.

None of the parks manage to attract large crowds of people. It is worth noting though that the observations of stationary activities were made on a weekday while the Olympic Sculpture Park, for instance, is very popular on weekends.

### **NEW CITY HALL PLAZA**



### **NEW FEDERAL COURTHOUSE**



Note: total number of people in the space at selected times

### ARE THE NEW PUBLIC SPACES POPULAR?

### NEW CITY HALL PLAZA & NEW FEDERAL COURTHOUSE

Unfortunately, the newly built public spaces in front of two of the city's major administration buildings are not frequently used. The squares in front of the new City Hall and the new United States Federal Courthouse both seem to have inviting designs. Their problem may lie in the fact that neither are located along popular walking routes, meaning that only a few people pass by. This emphasizes the importance of developing a good network to link the city's various destinations and public spaces.

The new City Hall Plaza seems to be popular during the lunch break, but the new Federal Courthouse is sparsely populated throughout most of the day when only between 10-15 people were seen to use the space at a time.

SEATTLE ART MUSEUM PLAZA

AVERAGE OF 12 PEOPLE





Note: the average of people registered as "stationary" at a given time

### ARE PEOPLE USING THE PLAZAS?

Numerous large buildings in downtown Seattle have a public or semi-public plaza at the street level. The majority of these plazas have very low numbers of registered activities, although some people use them around noon.

The plazas used the least include King Street Center Plaza and the Garden of Remembrance. These plazas had an average of 8-10 people present in the space at a given time. The Seattle Art Museum Plaza and Wells Fargo Plaza managed to attract an average of 12-17 people at a given time.

The most popular plaza seems to be the Russell Plaza with an average of 34 people present at a given time, but 43% of these people were standing or waiting for transport, which means they are not actually spending time in the space.

All in all, the number of people using the plazas are very low, and at some hours of the day many of the plazas are completely empty of people.

### STATIONARY ACTIVITIES

### SIGNIFICANT PATTERNS

**PIONEER SQUARE** 

25% SITTING ON PUBLIC BENCHES

OCCIDENTIAL PARK

**47%** 

**VISIT THE PLACE AROUND NOON** 

**OCCIDENTIAL MALL** 

61%

SITTING ON CAFÉ CHAIRS

Note: average numbers of all registered activities

### THE HISTORIC PART OF THE CITY

- PIONEER SQUARE, OCCIDENTAL MALL & OCCIDENTAL PARK

In the historic part of the city the public spaces offer a different atmosphere than the more "modern" environments elsewhere in the city.

These spaces are used more often compared with the rest of the city. For instance, the total number of activities taking place in Occidental Park throughout the day is 25% higher than in the Olympic Sculpture Park. Occidental Park seems to be the most popular of the historic squares, especially around lunchtime.

Pioneer Square is dominated by people sitting on benches, waiting for transport or simply standing. Occidental Park and Mall have many commercial activities and people sitting in café chairs. (This is actually the only type of activity taking place in Occidental Mall aside from standing.)

### **DEMOGRAPHIC SURVEY**

### AGE & GENDER

SEATTLE METROPOLITAN REGION: 3,424,400

INHABITANTS (2008)

CITY OF SEATTLE: 592,800 INHABITANTS (2008)

STUDY AREA:

4,300 INHABITANTS (2008) (CBD 2,000)

ADDITIONAL DAY TIME WORKFORCE POPULATION
IN CITY: 160,000

The Demographic Survey is a Qualitative Investigative Interview Survey using a random sample of the total population, which consists of all potential users of downtown. In order to secure a representative sample size, a minimum of 1,100 interviewed people were necessary. A total of 1,304 people answered the questionnaire, thus providing a representative sample.

### BACKGROUND INFORMATION ON THE RESPONDENTS:

- 01. GENDER Nearly as many men as women are represented, but there tend to be more men in Seattle.
- 02. AGE Only 12 of the respondents in the survey are older than 75 years, therefore it is difficult to say anything statistically reliable about this group. Children under the age of 15 do not appear in the demographic survey, since they were considered too young for interviews. The respondents are divided into groups depending on their age. Some groups cover a larger span of years than others, which influences the percentages of the various groups.
- 03. RACIAL/ETHNIC ORIGIN The White respondents (70.6%) are larger in terms of racial and ethnic background. The African American respondents (13.1%) are the second largest group.
- 04. EMPLOYMENT STATUS Almost 2/3 of the respondents are employed (72%). The last 1/3 of the respondents are more or less equally divided within the groups; student, non-employed and not-in-labor-force.



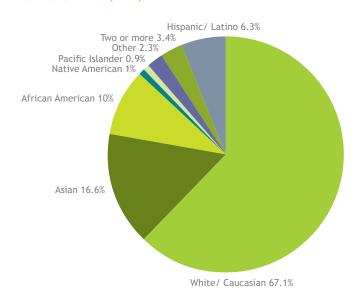


### 03. RACIAL / ETHNIC ORIGIN FOR SURVEY RESPONDENTS

# Hispanic/ Latino respondents 4.7% Native Hawaiian & other Pacific Islander respondents 1.6% American Indian & Alaska Native respondents 1.8% Black or African American respondents 13.1% Asian respondents 6.7%

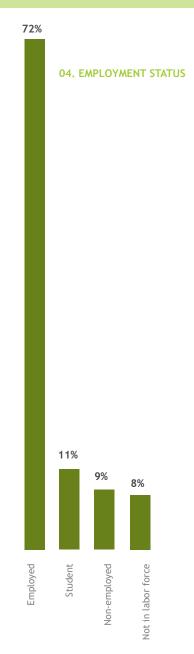
White respondents 70.6%

### RACIAL/ETHNIC MAKEUP FOR SEATTLE (2008):



### **DEMOGRAPHIC SURVEY**

### ETHNIC ORIGIN & EMPLOYMENT



### **DEMOGRAPHIC SURVEY**

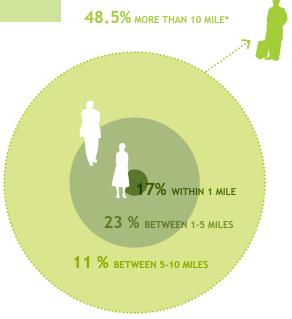
### SIGNIFICANT PATTERNS

People travel long distances to get to downtown, which is worth noting when planning commuter transportation. Seattle's downtown is also popular among people "from out of town."

The majority of interviewees are in downtown because of work. Another large group are visitors. The high percentage of tourists may have to do with the time of the year (surveys were conducted in July), since the summer is tourist season. When people shop they choose to spend time in downtown. Cultural events and the category "other" also invite people to downtown. The stationary surveys draw the same picture, since downtown is mainly active and populated within business hours.

The demographic survey reveals that almost half of the respondents reported feeling uncomfortable in downtown, and for a large group of people this is an everyday experience. This is alarming news since it may be an increasing feeling unless measures are taken to make people feel more comfortable. Large parts of downtown tends to be deserted after business hours, which is a problem in terms of safety. Fewer people in the public spaces may cause potential users to avoid certain public spaces. Creating a lively and mix-used downtown could help to make the area more comfortable.

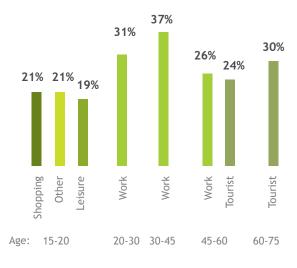
Note that when total percentages exceed 100%, it is because the interviewees gave more than one answer. This relates to questions about spending time in popular downtown places.



\*Note: More than 10 miles from downtown covers people living in the Seattle Metropolitan Region and tourists..

### PEOPLE TRAVEL FAR

Half of the respondents to the question "where do you live" reside in the City of Seattle and the other half are from out of town. 48.5% of the interviewees live more than 10 miles from downtown. It is worth noting that more than 10 miles from downtown covers people living in the Seattle metropolitan region and tourists. 17% live within 1 mile from downtown. 23% live between 1-5 miles from downtown. 11% live between 5-10 miles from downtown.



### MAIN PURPOSE FOR BEING DOWNTOWN

### (COMBINED WITH AGE & GENDER)

When asked "what is the main purpose for you being in downtown," almost 1/3 of the respondents reported work as their main purpose. A little more than 1 out of 5 of the respondents are tourists.

### AGE

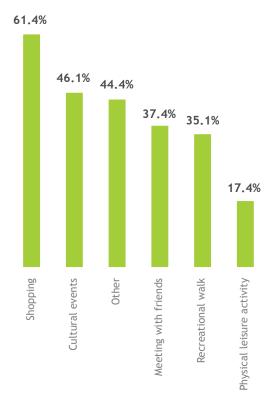
For the 20-60 age group work is in most cases the main purpose for being in downtown. In the three groups (20-30 years, 30-45 years and 45-60 years) tourist activities are another important reason.

The 15-20 age group is mainly downtown for shopping, leisure, or other activities.

The 60-75 age group is mainly in downtown as tourists.

### **GENDER**

There are not big differences between the genders. Women are more represented under "Tourist" and "Shopping" while the male respondents are more represented in the "Leisure" group.



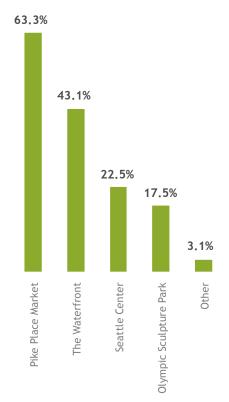
### SPENDING TIME IN DOWNTOWN (FREE TIME)

When asked "if you spend time downtown, what do you sometimes do," respondents said they mostly went downtown to go shopping during their free time. The second highest category is cultural events and many of the respondents chose the category "Other." Unfortunately, it is unclear what this category covers.

For the 15-20 age group shopping is still the highest category . "Meeting with friends" is the second biggest and "recreational walk" comes in third.

For the 20-30 age group shopping is once again the number one category. "Other" is the second, and "cultural events" is third.

For the 30-45 age group shopping is the primary reason for spending time downtown in their free time. For this age group Cultural events is second, while the "other" category is third.



### POPULAR PLACES IN DOWNTOWN

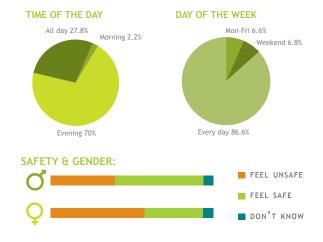
When asked "what places do you like to spend time," Pike Place Market gets mentioned by almost 1 out of 3 of the interviewees as a place they like to spend time. The Waterfront is also a popular place among the interviewees. The "other" category covers places such as Westlake Center, Pioneer Square, the Central Library and Pacific Place (shopping and entertainment center).

Examining the interviewees according to their age shows little difference between the different age groups. In all groups more than half of the interviewees mention Pike Place Market. For all groups the top three preferred places to spend time are the same. The only place where a particular age group stands out are the 15-20 age group who generally do not mention the Olympic Sculpture Park as a place they like to spend time.

### **DEMOGRAPHIC SURVEY**

### SIGNIFICANT PATTERNS

48% FEEL UNSAFE IN DOWNTOWN
70% OF THESE FEEL UNSAFE IN THE EVENING



### FEELING UNSAFE IN DOWNTOWN

When asked "are there places where you feel unsafe in downtown," almost half of the respondents experience feeling unsafe in downtown.

Taking gender into consideration it clear that the female respondents have a greater tendency towards feeling unsafe in the downtown. The male interviewees generally feel more safe.

When asked "what time of day," respondents tend to feel unsafe in the evening regardless of the day of the week. A large number feels unsafe all day and not just in the evening.

Feeling unsafe is more or less equally distributed among the age groups. The group that tends to feel less safe is the 15-20 age group.



### ANALYSIS SUMMARY

Seattle has a fine physical base for inviting more people to walk, spend time, and bicycle in downtown. The streetscape and the public open spaces basically have the factors that are needed for creating a more lively city.

However the most important findings of the analysis, outlined in three overall themes below, need to be addressed in order to create a downtown that meets the demands, challenges, and aspirations of the 21st century.

### SENSE OF IDENTITY

Downtown has strong competition from the surrounding neighborhoods when it comes to identity, strong character, and sense of place. The neighborhoods within downtown are not as distinct on the mental maps as the surrounding neighborhoods.

### PEDESTRIAN NETWORK AND USE PATTERNS

Compared to other cities of similar sizes and importance, public life and use patterns are very fragile within downtown, with few people walking and engaging in activities in the open public spaces, the pedestrian network could be improved considerably and linked to a hierarchy of public spaces.

### ATTRACTIVENESS, COMFORT AND FEELING OF SAFETY

Downtown has a 9-5 / monday-friday activity pattern, leading to a less attractive and less comfortable downtown outside of business hours. This affects the use patterns during the night time and on weekends.

On the following pages, more specific issues are listed, summarizing the two analysis chapters of this report; the city and the people.

### SUMMARY OF "THE CITY"

### THE NETWORK:

- Everything in downtown is within reasonable reach for pedestrians, but the steep topography on east-west connections presents a challenge when walking.
- The pedestrians are offered easy access on wide sidewalks but the pedestrian network could be developed much further, introducing more pedestrian priority and better balances between road users, thus linking destinations with interesting and inviting routes.
- The bicycle network in downtown could also be developed much further so that in future all user groups will feel invited to bike on a safe, coherent and legible bicycle network.
- The waterfront could represent a great amenity for downtown but appears somewhat neglected, dominated by vehicular traffic and barriers, and is not well linked to downtown.

### **URBAN LANDSCAPE:**

- Downtown has many open spaces but they are not connected in an open space network or apparent hierarchy, leaving many of the spaces without function or apparent identity. The quality of the spaces also vary a lot not representing importance or use.
- Downtown has a system of alley ways that represents an unexploited potential to become an evident part of downtown identity
- Attractive ground floor facades makes the streetscape inviting and attractive. Unfortunately in downtown the majority of ground floor facades are either closed completely due to the steep topography or of poor quality being dull and inactive. Parking in structures presents a challenge when they face the street with parked cars on ground floor.

### THE CULTURE:

- Evening activities are few and concentrated in specific areas.
- Outdoor cafe culture has much potential but could be strengthened.
- Public spaces for celebration or gathering are not obvious or well defined.

### SUMMARY OF "THE PEOPLE"

Very fragile public life pattern:

- Few people walking during the day
- Very few people walking in the evening
- Few active streets
- Downtown has few pedestrians compared with other cities

(New York, Sydney, Melbourne, Copenhagen & San Francisco)

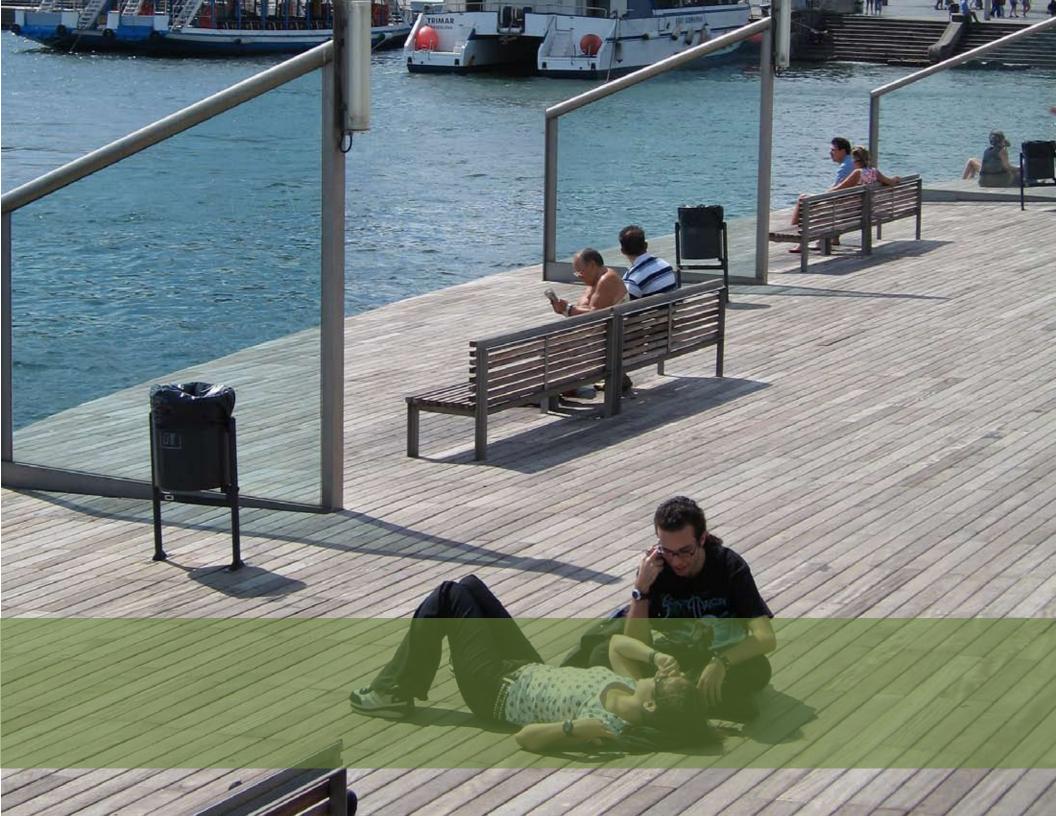
- Few active public spaces
  - most public spaces have very little activity
- Little diversity in activities
- · Hardly any children playing
- Very little physical activity
- Public perception of feeling unsafe, especially in the evening (demographic survey)
- Few age groups represented in downtown
- Most people go to downtown with the main purpose of work
- Quite a few people in downtown are visitors

The **RECOMMENDATIONS** illustrates visions, "blue sky thinking," and concepts on different levels, divided into two sub-chapters:

THE STRATEGIES identifies six overall Center City approaches to strengthen public life.

THE PUBLIC SPACE PROGRAMS illustrates how to apply these strategies to the focus areas. It establishes programmatic approaches to pedestrian needs and places for citizens to interact. These are not public space designs.

### RECOMMENDATIONS STRATEGIES PUBLIC SPACE PROGRAMS QUICK WINS







### **RECOMMENDATIONS - STRATEGIES**

THE SUSTAINABLE DOWNTOWN • THE UNIQUE DOWNTOWN

THE INVITING DOWNTOWN • THE LEGIBLE DOWNTOWN

THE VIBRANT DOWNTOWN • THE DYNAMIC DOWNTOWN



### SIX STRATEGIES

### POTENTIAL:

A FANTASTIC SETTING



A DISCONNECTED WATERFRONT

STRATEGY:

THE SUSTAINABLE DOWNTOWN



Ensure a downtown with a sustainable footprint

- Upgrade the waterfront to strengthen and celebrate downtown as a waterfront city
- Create strong links between downtown and the waterfront
- Enhance east-west streets as green connectors
- Improve "green lung" capacity of alleys
- Introduce a great variety of green roofs and walls
- Apply storm water filtration and recycling throughout downtown

### POTENTIAL:

DOWNTOWN PLACED IN CENTER



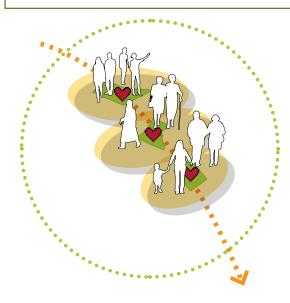
**CHALLENGE:** 

WEAK PUBLIC LIFE PATTERNS



STRATEGY:

### THE UNIQUE DOWNTOWN



Ensure a downtown with a strong identity

- Enhance the following downtown neighborhoods connected with the waterfront:
- Retail Core
- West Edge
- Pioneer Square
- Identify a "heart" for each district
- Enhance character, network and functions for each district

### POTENTIAL:

DISTINCT NEIGHBORHOODS

### CHALLENGE:

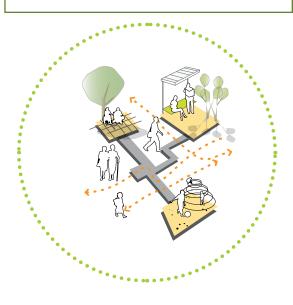


LOW OPEN SPACE IDENTITY



STRATEGY:

### THE INVITING DOWNTOWN



Ensure a downtown that invites people to visit, stay, and interact

- Implement a public space network that links public spaces, streets, and recreational sites
- Identify public spaces at three different levels:
- City scale
- Neighborhood scale
- Block scale

### POTENTIAL:

DISTINCT NEIGHBORHOODS



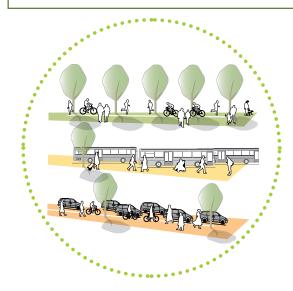
**CHALLENGE:** 

UNBALANCED TRAFFIC SYSTEM



STRATEGY:

THE LEGIBLE DOWNTOWN



Ensure a downtown with a 21st Century transportation system that has complete streets and gives priority to transit, pedestrians and cyclists, and freight.

- Define a hierarchy of street types for all Center City streets to reinforce distinct functions and character.
- Public Waterwfront Promenade
- Main Street
- City Avenue
- Green Connector
- Central Transit Spine

### POTENTIAL:

**ACTIVE DURING WORK HOURS** 



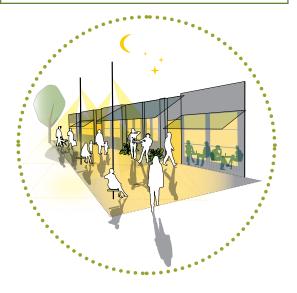
**CHALLENGE:** 

OFFICE FOCUSED DOWNTOWN



STRATEGY:

THE VIBRANT DOWNTOWN



Ensure a downtown that caters to all user groups and seasons

- Increase night time use of three areas:
- Waterfront
- 3rd Avenue
- Office core
- Establish a night time network
- Introduce more night time attractions
- Illustrate an annual events calendar

### SIX STRATEGIES

### POTENTIAL:

**GREAT COFFEE CULTURE** 



**CHALLENGE:** 

FRAGILE URBAN CULTURE



STRATEGY:

THE DYNAMIC DOWNTOWN



Ensure a downtown that is a peer to other "premier" and innovative cities

- Strengthen downtown's brand and build on publicprivate partnerships and business networks
- Involve the important players in further developing the city culture
- Encourage events and temporary elements

### **BLUE CITY**

A CITY ON THE WATER With its unbeatable location on Elliott Bay, Seattle has many opportunities to exemplify the "Evergreen State" image at the city scale.

ACCESS TO WATERFRONT Enjoyment of Seattle's beautiful waterfront can be improved by strengthening physical connections as well as protecting or improving views to the water from downtown.

STORM WATER FILTRATION & RECYCLING Innovative technologies and design strategies can begin to restore water quality in Elliott Bay, reuse water, and reduce run-off volumes.

### **GREEN CITY**

**NETWORK** A connected and coherent green network of parks, green belts, trails and street trees will make the Center City more attractive, provide access to nature, and improve ecological conditions.

**GREEN CONNECTIONS** Invite more people to walk and spend time in the city by offering memorable green experiences along city avenues and streets.

**POCKET PARKS** Gaps in the downtown park system can be filled by installing little pockets of green whenever an opportunity arises.

**ALLEYS** Under-utilized space in alleys has great potential to serve the city and its people as new "green lungs."

**GREEN ROOFS AND WALLS** Green walls and roofs improve air and water quality and can be attractive extensions of green space in the downtown.

MICROCLIMATE Creating places where the human body is comfortable such as providing shelter from rain and wind will invite people to stay and enjoy time in the city.





BRING THE CITY TO THE WATER At the moment there is a gap between downtown and the waterfront. The city must transform that 'gap' and reintegrate it, so city and waterfront are well connected.

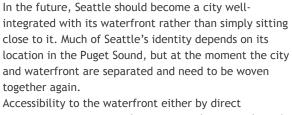


integrated waterfront will enliven adjacent areas to create a vibrant place. The waterfront must be easy to get to and from and be well integrated with the public transit network.



VIEWS AND ACCESSIBILITY Facilitating pedestrian flow between the downtown and the waterfront will allow more people to experience the iconic views of Elliott Bay, Mount Rainier, and the Olympics. View corridors should be preserved whenever possible.





connections or views to the water can be strengthened and improved.



PUBLIC ROUTE ALONG THE WATER A place to walk, exercise, and enjoy the view is an amenity that will be appreciated by all ages throughout the seasons.



NON-COMMERCIAL ACTIVITIES It is important to leave space for recreational use, temporary festivals, and simply for spending quiet, contemplative time near the water.



WATERFRONT PROMENADE It should be possible to walk along the water, buildings should be withdrawn from the waters' edge.

### A FANTASTIC WATERFRONT

THE CITY TO THE WATER

A public route along the waterfront should be established to ensure that all people have access to the water.

The scale and width of the space is of great importance: create a comfortable human-scaled space with active facades.

A variety of sizes and types of public space will accommodate diverse functions throughout the seasons, and ensure that all users feel welcome. People should be able to move along the water, stop for a short rest, meet friends for a lunch break, have a group tour, peruse a special market or festival, and more.



**RECYCLING AND FILTRATION** Rain and storm water can be collected, stored and purified at a later date, or reused for irrigation and toilet flushing.



FILTERING STORM WATER Simple approaches to slowing or delaying storm water run off make pockets of green in the streets, and have benefits for water quality and municipal water infrastructure.

### WATER IN THE CITY

Rain water from roofs and storm water from streets and alleys can either be cleaned before discharging into Elliott Bay, or be reused in the city. Structures for collecting water add interest to the street scape and allow people to notice how much water falls, where it goes, and how clean it is. Other benefits of water recycling include habitat and water quality improvements in Elliott Bay, and reductions in water treatment and supply costs.



storm water along East-West streets should take advantage of the characteristic topography and be an effective way to manage run off volumes.

### **ENHANCE THE GREEN AMENITIES**

Seattle's large scale green network needs to be strengthened, and downtown can become a more functional link. Parks, street trees, green roofs, vegetated walls, and green connections can all contribute to the city's green infrastructure.

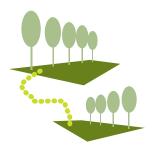
Recreational routes for pedestrians and bicyclists should mirror these green links.



Make an overall strategy for connecting Seattles green spaces and parks.



Downtown should have clear and attractive connections to and from the green amenities.



Connect the green amenities in a green network.

### **EAST-WEST GREEN CONNECTIONS**

Since the east-west streets are on steep slopes oriented towards towards the west, they are significant in creating a green network. Some of these streets are already designated as Green Streets in the City's Zoning and Land Use Code. Corners and bus stops can feature small-scale green spaces that soften the building facades, provide an enjoyable transition between high rise buildings and the human scale of the street, and offer places to sit. The steep topography could enable water to flow towards strategically sited rain gardens and green alleys as part of a larger network of green spaces.



Steep streets bring water downhill towards alleys, forming a blue-green network with a hierarchy of functions



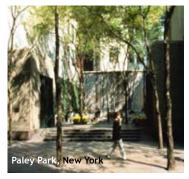
Small pocket parks serve ecological functions and provide nicely-scaled places for people.



Street-side filtration cells are a simple and unobtrusive way to add green to the streets.

### **GREEN POCKETS**

Small parks are very important public spaces, especially if there are no larger public parks within a short waking distance. They are human-scaled, convenient, and bridge the gaps in the larger scale green network and public space network. Even with very little room, positive microclimates and social space may be created. Green pockets should be inserted into the downtown fabric at every opportunity, to balance the current deficiency of green open space and ensure that all city dwellers benefit from regular contact with nature.



Water, trees, and a change in paving create a peaceful pocket in a bustling city.



 $\label{personalized} \mbox{ Personalized space that benefits the entire street.}$ 



A small pocket space with simple attractions such as benches, trees, and a fountain.



Personalized space that benefits the entire street.

A lush, green alley can be created with very simple construction.



Using the vertical plane is a good strategy for economizing space.

### **ALLEYS AS GREEN LUNGS**

Alleys are a key resource in Center City, they receive very little vehicle traffic and they are ideal places for inserting pervious pavements, rainwater catchment and filtration systems, and vegetation. These spaces can become pleasant walking routes where people can step away from traffic to talk with friends, breathe clean air, watch the seasons turn, and enjoy a bit of urban green at a comfortable scale.



Green roofs form an important link in a green infrastructure network, just on a different level in space.



Vegetation on green roofs has significant absorption and filtration capabilities.



The planting palette for green roofs is unique and is adaptable to various weather conditions.

### **GREEN ROOFS**

Significant advances in green roof technology are expanding possibilities for new buildings as well as for retrofitting existing buildings, for both accessible and non-accessible green roof types.



It is comfortable to sit in the sun on a bench with some protection in the back such as a green edge or a wall. A long bench invites many people to sit down beside each other.



Movable chairs that allows for various uses and ways of spending time is popular.

### **GREAT MICROCLIMATE**

People feel comfortable in a space, where their well-being is prioritized. Good microclimates are made by allowing people to enjoy pleasant aspects of weather conditions. Vegetation helps to calm air movement, provides clean air, and filters out background or traffic noise. Plantings and articulated building facades can provide structure at a human scale where people feel comfortable pausing, staying, and watching the city move around them.

### THE UNIQUE DOWNTOWN

Surrounding downtown Seattle are great neighborhoods with distinctive characters. This should be the reality for downtown as well. Downtown is currently made up of 5 neighborhoods.

A set of opportunities is created by identifying three specific downtown districts that overlap with the neighborhoods. A unique downtown can be achieved through strategic approaches.

### **EACH DISTRICT IS AN ORGANISM**

Identity and character can be strengthened, and a sense of ownership and pride established, by focusing on each district as its own entity with a good balance of residents and visitors. By including the waterfront in two of the three districts, instead of treating it as a district of its own, the waterfront becomes part of downtown and adds to the identity of the two suggested districts.

### PROXIMITY, DIVERSITY, FLEXIBILITY

A strategic approach for each district includes working with the proximity of connections, destinations and functions, diversity in terms of activities, users and seasons, and flexibility in terms of built form, typological variation and adaptable use.

### CHARACTER, NETWORK, FUNCTIONS

Focus should be placed on identifying and describing the character, network and functions of each district.

### THE BEATING HEARTS

The identification of a heart is crucial for each district. A heart is a place that can act as the generator and connector for the district: a place that all residents and daily users can relate to and interact within as well as a place for celebrations, district meetings and everyday life.



# PUBLIC MARKETICENT

Visual interpretation - An iconic touch

The district heart - Pike Place Market - should act as a center and generator of activities for both locals and visitors. Establishments that support the district and everyday life, such as a supermarket, pharmacy, day-care, playground, bakery, kiosk, hairdresser, should be located in close proximity to the heart.

The streets and avenues are connecting functions and places. The better functioning and more attractive the connections, the more lively the West Edge will become and the more visitors it will invite



An attractive public realm and various invitations for public life can keep the district vibrant and continually interesting to visit and re-visit. Weekends, off-hours and seasonal changes should be given special consideration.

# THE UNIQUE DOWNTOWN

# **WEST EDGE - CHARACTER**

The West Edge already has some of downtown's most important attractions - Pike Place Market, 1st Avenue and the waterfront - making it a preferred destination for many visitors.

The character of the district can be strengthened by improving the connections to the waterfront as well as the connections within the district itself.

## **WEST EDGE - NETWORK**

The network of streets and places should cater to visitors and citizens moving short distances on foot. An inviting network should, in combination with the larger attractions and amenities of the West Edge, become the district's trademark - proximity, mobility and vibrancy.

# **TODAY: AGES 16-50**



Today, the West Edge is dominated by visitors with a singular purpose - shopping.



Invite more people to live in the West Edge - both families and seniors.

## **WEST EDGE - FUNCTIONS**

Today, the West Edge is dominated by people visiting with single purposes - shopping and sightseeing. Inviting more families and seniors to live in the West Edge is key to creating a diverse and mixed-use district. At the same time, upgrading the quality of the public realm and introducing more attractions can invite visitors to spend time on a greater variety of activities.

# THE UNIQUE DOWNTOWN

# **RETAIL CORE - CHARACTER**

The Retail Core's character and identity as an attractive retail and office core can be strengthened by introducing more green pockets for lunch breaks, more outdoor meeting places and more specific functions to support the professional lifestyle.



Visual interpretation - A professional beat

### **RETAIL CORE - NETWORK**

The network of streets and places should be inviting for a range of activities that support the district in its role as a retail core: easy walking connections, wide sidewalks, interesting and attractive ground floor facades, outdoor cafe seating, places for events and gatherings, and places to meet and interact. The network should also ensure a combination of flow efficiency, chances to meet, and interludes with low activity, thus supporting the rhythms and needs of the work force.

The network should incorporate easy access to public transport and support activities outside of retail and office hours.



The district heart should act as a center and generator of activities for both locals and visitors. Establishments that support the district, such as news agents, coffee shops, library, kiosks and delis should be located nearby.



The streets and avenues are important connectors between functions. They should be the nerves of the district and ensure a healthy pulse.



Small pockets should offer an alternative to the more hectic street life. The character of the Retail Core should be enhanced with places for meditation or quiet pauses, or places to bring a computer and work.

# **RETAIL CORE - FUNCTIONS**

Today, the Retail Core is dominated by user groups visiting with a single purpose - working, shopping or staying in hotels. Inviting more residents will be key to creating a more mixed-used district.

Greater flexibility and interaction can also be introduced by targeting and inviting more small, knowledge-based companies. This will further establish the character of Seattle as a "knowledge-based" city.

# **TODAY: WORKFORCE**



Today, the district is dominated by visitors with a single purpose - working.

# INVITE RESIDENTS AGES 25-65

**INVITE MORE PEOPLE TO LIVE IN THE DISTRICT** Invite more small, knowledge-based companies to establish themselves in the Retail Core to attract a creative and knowledge-based work force.

Visual interpretation - A Bohemian Rhapsody

The district heart (Occidental Park) should act as an ever-changing focal point and activity generator for locals as well as visitors. Adjusting to seasonal changes will enable an active heart throughout the day, week and year.



The streets in Pioneer Square should be more than just connections - they should be meeting places, recreational invitations and places to interact and meet neighbors.



It is important that Pioneer Square life can unfold in the public realm. The open spaces should remain flexible for a variety of uses and avoid becoming over-programmed. An attitude of acceptance by the surrounding community will encourage a vibrant range of activities.

# THE UNIQUE DOWNTOWN

# **PIONEER SOUARE - CHARACTER**

Pioneer Square has a very strong identity and character. The built form reflects the human scale, with red brick textures and details, and beautiful old street trees. These qualities, along with the First Thursday Art Walks, numerous galleries and nice outdoor cafés, the district has an almost Parisian atmosphere.

# PIONEER SQUARE - NETWORK

Streets, squares and alleys play an important role as generators of public life in Pioneer Square. The public realm that supports the bohemian atmosphere and unfolding activities should offer a combination of temporality and flexibility, adjusting to the time of day and seasonal changes.

# TODAY: VISITORS 35-65+



Today, Pioneer Square has some residents and attracts tourists.



INVITE MORE PEOPLE TO LIVE IN PIONEER SQUARE, ESPECIALLY FAMILIES WITH KIDS. Invite more small, arts- and knowledge-based companies to establish themselves in Pioneer Square to attract a creative and knowledge based work force.

# **PIONEER SQUARE - FUNCTIONS**

Pioneer Square attracts a variety of users - sports fans, night club patrons, art lovers, residents, and others. This eclectic mix can sometimes produce conflicts.

# THE INVITING DOWNTOWN

In order to make a city more inviting, it is necessary to work simultaneously with a range of strategies at multiple scales.

Downtown Seattle has an evident need for a public space network and hierarchy in order to introduce and maintain a strong pattern of city culture and use. Downtown is also in need of more invitations for spending time in the city. These invitations must be made on a street and spatial scale. An inviting city is also characterized by qualities on a smaller scale: inviting facades, playful elements, and intriguing art installations.

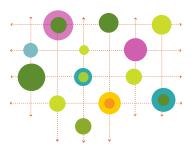
# **PUBLIC SPACE NETWORK**

The illustrated network links main pedestrian corridors with open spaces and alleys, through a general upgrading of the public realm. Focus should be put on the following: pedestrian priority in terms of timing traffic lights for pedestrian "green waves," introducing benches along the routes, minimizing the number of sidewalk interruptions where pedestrians have to give way to cars entering and exiting parking garages, introducing human scale streetlights, ensuring attractive ground floor frontages, introducing good quality materials in street furniture and paving, and ensuring clearly marked pedestrian crossings without push-buttons.

# **OPEN SPACE HIERARCHY**

It is possible to develop more targeted invitations for use, a broader range of uses and user groups, and a higher degree of variation in layout and design by introducing a public space hierarchy with three levels of importance: the city, neighborhood and block scales.





### WELL LINKED PUBLIC SPACES

A well functioning network connects all the public spaces in an attractive and inviting way. The public spaces come alive when people are present, so we must invite people from one space to the next.



### INVITE EVERYBODY

A fine public space network is also a city for all. Some people will come to the city because they have to for necessary or routine activities. But other individuals and user groups must be invited. Therefore, plan for activities and spaces that invite a wide range of interests and all age groups.



### VERSATILE PUBLIC SPACES

People are likely to accept invitations to participate in a variety of activities in a city, if they feel invited. If they are only invited to a limited number of activities, a lower level of participation and use can be expected. Therefore, plan for a wide variety of activities in the city.



### A LIVING CITY THROUGHOUT THE DAY AND YEAR

Plan for a city that is active throughout the seasons, and that offers interesting things to do in the evening. An active city where many people can meet and interact feels much more safe than a city where only a few people are using the public spaces at night.



### CREATE A FINE PUBLIC SPACE NETWORK

Seattle is in need of a stronger public space network; one that invites people from one space to the next, from one end of downtown to the other. Many of the existing open spaces are poorly connected and, therefore, not as well used as they could be.

A fine network for people has a strong focus on pedestrians and bicycles since they are keeping the public spaces lively.

A well functioning network attracts a broad range of activities and, in that sense, both open spaces and streets are important.

A good network aims to create an inviting city at all times of the year and to be as active as possible throughout day and night. This makes the city more interesting and improves perceptions of safety.



Recreational links can be created with streets that invite people to slow down and just stroll along. These streets have room and invitations for enjoying city life.



Street don't have to be car-free to have recreational value. Streets with some traffic may also have recreational qualities if they have a high pedestrian quality, comfortable sidewalks, and places to sit down and watch the life of the city.



Recreation is, of course, the main theme for recreational links, such as promenade routes with many opportunities for recreational activities. Recreation is not just about sitting down. Active recreation also includes skating, jogging, and ball games.

### RECREATIONAL LINKS AS CONNECTORS

All links with a high pedestrian priority and fine recreational opportunities are of great importance in the overall network. These links will guide people smoothly through the city, since they are very attractive to move along. These links are just as important as the city's many open spaces.

In Seattle, there are too few recreational links at the moment. It is recommended that more be added by transforming and upgrading some of the existing links.

# THE INVITING DOWNTOWN

# **PUBLIC SPACE HIERARCHY - CITY SCALE**

Some public spaces are city-wide attractions. They are the large pearls in the network, and the network must ensure good connections between them. City scaled open spaces invite visitors from the city, the region, and beyond. The Olympic Sculpture Park is a good example.



Federation Square, Melbourne, Australia

# PUBLIC SPACE HIERARCHY - NEIGHBORHOOD SCALE

A good city has many neighborhood spaces. This type of public space is much more flexible than spaces at the city scale, since they do not have the same iconic experience attached to them. Neighborhood spaces can vary in activities and identity, and that is why they may lie close to each other since they invite to different activities.



New York

# PUBLIC SPACE HIERARCHY - BLOCK SCALE

Block-scale spaces and pocket parks are local. They are places where people can either stop for a short rest or spend a whole afternoon. Even small corners are effective block-scale public spaces. There are very few block-scale spaces in Seattle's downtown. Locations should be found for block-scale public spaces, which can become integrated into the larger public space network in the future.





**DESIGN MANUAL** Good detailing is necessary for more people to choose to spend time in spaces. Establish a coherent design manual for furniture and elements.



PLAYFUL ELEMENTS Playful elements with high aesthetic quality will be enjoyed by people of all ages.



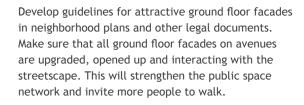
MORE PLAYGROUNDS IN DOWNTOWN sculptural value and thereby add quality to the

Create more dedicated places for families and children. Even playgrounds may have high city as well as providing play space.



of downtown.

ATTRACTIVE FACADES



THE INVITING DOWNTOWN



TRANSPARENT RETAIL UNITS Attractive retail units - many units, many doors, high level of transparency, variation etc.



OPEN FACADES Allow facades to be opened up on fine days, and let the activities indoors activate the street life outdoors.



GOODS ON DISPLAY Shop owners may display their goods outside, with some regulations. It could be a permission based strategy, since displaying certain goods may improve or worsen the quality of the street scape.



VARIATION BETWEEN NIGHT AND DAY Lighting trees creates a new atmosphere and is welcoming during the dark hours.



**ARTISTIC EXPERIENCES** Art installations create experiences and can be used to establish identity. The art installations may be both permanent and temporary.



TELLING STORIES Tell the Seattle history in new and surprising ways for instance engraved in the paving.

### **EXTRAORDINARY EXPERIENCES**

Let downtown have that "little extra". Formulate dynamic strategies for introducing extraordinary experiences in the city spaces. These experiences may be permanent or temporary. They may change with the seasons and create a different atmosphere during the day and night. They may tell stories in a subtle way.

# THE LEGIBLE DOWNTOWN

# AN OVERALL STREET HIERARCHY

Introducing a street hierarchy in terms of identity and activities gives the opportunity to create a city with greater variation offering different types of experiences. The proposed Center City public realm hierarchy in downtown uses the existing activities on the various streets and avenues as a starting point, and introduces new features and identities. Due to the challenging downtown topography, one must address downtown streets and avenues with different measures.

# **AVENUES AS URBAN ATTRACTORS**

All the avenues are fairly flat, running north and south. They already act within a sort of hierarchy that can be strengthened. There is potential to enhance the avenues to ensure inviting ground floor facades, a high degree of urban character and attractive urban street elements.

### STREETS AS GREEN CONNECTORS

All of the east-west streets have a challenging topography and thus a high percentage of inactive and closed ground-floor facades. There is potential to identify some of these streets as green connectors and develop green interludes, street trees and human-scale street lighting, as well as preserve views and introduce numerous places to rest.





### PEDESTRIAN STREET

A pedestrian street gives high priority to pedestrians, and to public transport, since this supports the pedestrian flow. It is easy for pedestrians to cross the street, when they feel like it.

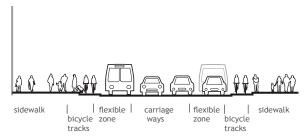


sidewalk carriage ways for public transport

sidewalk

### PUBLIC TRANSPORT AVENUE

A public transport avenue gives high priority to public transport, and the things supporting it; such as waiting facilities, good lighting and active ground floors to increase perceived safety at night.



 $<sup>\</sup>ensuremath{^{\star}}$  The flexible zone may be used for street trees, parking, bus stops or regular drive lanes.

### CITY AVENUE

City avenues support all means of transportation. They are comfortable for pedestrians, bicycles, public transportation, and vehicular traffic.

# THE LEGIBLE DOWNTOWN

# PLAN FOR PEOPLE

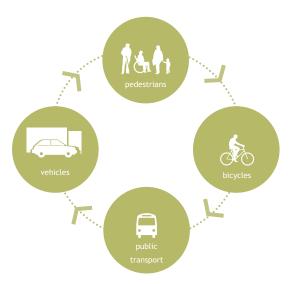
Improve legibility in downtown by upgrading avenues and streets into more attractive, inviting and safe routes for pedestrians and bicycles.

Think in terms of people capacity instead of vehicular capacity and put people first in the planning process.

When planning and designing road schemes, start at the facade - with the pedestrian space - and then work out towards the middle of the street.

For more details on the Waterfront, see "The Sustainable Downtown" and "Public Space Program."

For more details on east-west streets as green connectors, see "The Sustainable Downtown" strategy.



### PUT PEOPLE FIRST!

When working on the overall city strategies, as well as when planning streets and spaces, people ought to be the starting point for the planning process!

# THE LEGIBLE DOWNTOWN

### PEDESTRIAN PRIORITY

Pedestrian priority may be introduced in various forms. In its purest form it is pedestrianized streets.

Pedestrian flow could also be optimized on existing streets by other means.

In general it is recommended to put a much higher priority on pedestrians than there is today. This priority may vary in form depending on location.



Better accessibility for all is crucial. Think of movement in the streets in terms of pedestrian, bicycle, and vehicular flows. There is room for significant improvement in downtown.

Pedestrian routes must be optimized in relation to the sidewalks themselves as well as cross walks. High quality walking experiences are characterized by short waiting times, few stops, and good accessibility in general.

# ATTRACTIVE WALKING ROUTES

Straight forward interventions, such as upgrading sidewalks with high quality materials and paving, will contribute significantly to improved walking conditions in the downtown. Other aspects of the public realm are also important in achieving this aim. Soft edges and attractive ground floor frontages form an important interface between buildings and spaces. This zone needs to be carefully considered. Pedestrians' need for places to rest and socialize on the streets is also essential. Therefore minimizing traffic noise and emissions is necessary in order to invite a more vibrant street life.



PEDESTRIANIZED STREETS Pedestrianized streets represent pedestrian priority in its purest form. Seattle could also consider introducing pedestrianized streets in certain seasons in Pike Place Market during the summer.



HIGH QUALITY SIDEWALKS Sidewalks may include various elements but a good walking width must be kept clear. Paving can be aesthetically pleasing way to indicate high pedestrian priority.



ACTIVE GROUND FLOOR FRONTAGES
Develop a program for upgrading frontages. Raise
awareness of the importance of transparent and
interesting ground floor frontages.



SHARED SURFACE Shared surface streets give high priority to pedestrians, but are only possible where traffic numbers are low. Shared surfaces may also work between streetcar/pedestrians or bicycles/pedestrians etc.



ACCESSIBILITY FOR ALL Ensure accessibility for all by minimizing barriers. For instance at intersections all ramps should be placed straight in front of crosswalks.



**SOFT EDGES** Encourage buildings with soft edges that invite people to stand, sit, and enjoy public life at a comfortable distance.



SIDEWALK OVER SIDE STREETS Creating uninterrupted routes for pedestrians prioritizes pedestrian flows. The sidewalk surface is continued over side streets with low traffic. Pedestrians have right of way.



FEW AND SHORT STOPS Limit the number of stops along primary walking links. Reduce waiting time to a maximum of 15% of the total travel time. Pedestrian signals that inform people about waiting /crossing time tend to minimize jay-walking.



RESTING PLACES Develop guidelines to install more public seating that will offer passers-by a rest and help the elderly and families with children; for example, place a bench or resting place every 820 feet.



SEPARATED BICYCLE TRACKS The safest way to create a bicycle route is with raised tracks that are separate from car lanes. Copenhagen.

# nhagen, Denmark

MARKERS IN DIFFICULT CROSSINGS Paint challenging intersections to delineate where the bicyclists are riding and make the car drivers more alert, Copenhagen, Denmark



should drive closest to the sidewalk - since it is much safer to fall into the sidewalk than into the street. Parking spaces should be placed between bicycle lane and the street.





CITY BIKES ARE AN INVITATION Invite people to choose the bicycle for shorter rides by introducing a public bicycle system - "citybikes" - that is cheap and easy to use.

# **BICYCLES - COMFORT**

**BICYCLES - SAFETY** 

People will choose to bicycle if it is comfortable. A well connected network of bicycle tracks is essential. The width of the bicycle tracks should allow people to drive next to each other - so it is possible to pass. High quality and well placed bicycle parking is also essential.

THE LEGIBLE DOWNTOWN

A bicycle network should invite all users, including children and seniors. Therefore, safety is absolutely crucial. The bicycles should be physically separated from the drive lanes. This means that any sort of lines are a start, and lanes are a step on the way in an interim

strategy towards getting bicycle tracks. Raised bicycle tracks is a very safe and space efficient way of creating

bicycle routes where kids at age 8 and grandmothers at

On one-way streets, the bicycle tracks should be placed

age 68 will be much more likely to bicycle.

on the right hand side in the direction of travel.

In a "young" bicycle city, where not that many people have bikes, introducing "city-bikes" for residents and visitors has proven to be a very good idea.

### **BICYCLE TRACKS:**

A 18-20 % increase in bicycle traffic and 9-10% decrease in car traffic is the effect of the introduction of cycle tracks (physical separation).

### BICYCLE LANES:

A 5-7% increase in bicycle traffic and no change in car traffic is the effect of the introduction cycle lanes (painted lines).\*

**BICYCLE TRACKS VS. BICYCLE LANES Cities** with many bicyclists have a system where bicyclists from 8-80 years feel comfortable and safe when cycling. If many people are to be invited to bike, how bicycle routes are organised is crucial.



**OVERLAPPING NETWORKS** Combine the bicycle network and pedestrian network. The network should lead bicyclists to important destinations within the city. Odense, Denmark



nhagen, Denmark

TWO BICYCLES MUST BE ABLE TO PASS

for two or more bikes to pass each other.

Wide bicycle tracks are necessary so it is possible

RECREATIONAL ROUTES Create an enjoyable route along the water so people are invited to take the bike instead of the car. Battery Park City, New York



**GREEN ROUTES** Establish green routes connecting downtown with surrounding neighbourhoods and nature.

# **BICYCLES - ENJOYMENT**

The bicycle network should overlap with the pedestrian network since it is easy (and necessary) to switch between the two. The bicycle network must link to attractive pedestrian routes, spaces, and activities. Introduce some leisure routes within the city, for instance along the waterfront. Introduce some green trails that link the downtown network with the surrounding nature.

<sup>\*</sup>Effekten af Cykelstier og cykelbaner (The Effects of Bicycle Tracks and Bicycle Lanes) Søren Underlien Jensen, 2006, www.trafitec.dk

# THE LEGIBLE DOWNTOWN

# **PUBLIC TRANSIT & LEGIBILITY**

Legibility is a key in planning public transit. It is about integrating and overlapping various modes of public transit and different routes. Make sure that all of downtown is efficiently supported by public transit.

Improve the information for public transit so wayfinding becomes easier.



EASY WAY-FINDING Make it easier to find your way. Improve way-finding when shifting from one mode of transportation to another (eg. at King Street Station). Highlight entrances to bus tunnels, so they are easier to find.



INTEGRATE ALL OF DOWNTOWN Make sure it is easy to use public transit all over downtown. For instance it would be useful to make better public transit connections to, from and along the waterfront.



**INFORMATION** Improve the possibilities of forming a general view of the public transport network and downtown. At the same time this information may be used by pedestrians in general.

# WAITING FOR PUBLIC TRANSIT

Waiting for public transit must be comfortable. In a climate like Seattle's, covered waiting facilities are preferable. Increase efficiency by indicating when the next bus is arriving.

Combine public transit seating with general public seating.



**ELEGANT AND COMFORTABLE WAITING**Let the bus shelters be a part of the general
Seattle street furniture, so all things are related in terms of design.



WHEN IS THE NEXT BUS ARRIVING?
An information pillar shows bus routes, schedules and how many minutes until the next bus.



PUBLIC SEATING AT TRANSIT HUBS
Combine "public transit seating" with public
seating that invite both pedestrians and public
transit users to sit. People are likely to take a
rest on a public bench but not on a bench in a
bus shelter.

# PUBLIC TRANSIT & FEELING SAFE It is important that the waiting situation

It is important that the waiting situation is a safe experience. Street lighting is necessary so you do not wait in a dark area.

Make sure that there is activity beside the public transit waiting area at the major transport hubs. As many ground floors as possible should be busy and open after dark along 3rd Avenue. If the ground floors host activities that are closed at night, let them be brightly lit.

If there are no ground floors to open up consider allowing kiosks or street vendors to open a booth.



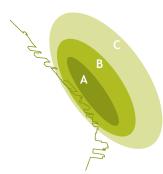
**LIGHT IN BUILDINGS** This building contributes an experience to the street even though it is closed at night.



STREET LIGHTING AND GROUND FLOORS People feel more safe when public spaces are lit up at night. Light in ground floors has a positive effect.



KIOSKS OR STREET VENDORS Kiosks and street vendors help populate a space, so it is worth considering this type of activity to support some of the transit hubs.



### ZONE A:

The most expensive zone to park your car and with the fewest number of parking lots.

### ZONE B:

A bit easier to find an empty spot, but still a pricey place to park.

### ZONE C:

Easy to find an empty spot and an economical alternative to zone A & B.

### REGULATE PARKING IN DOWNTOWN AND GET BETTER STREETS AND SPACES

The diagram must be seen as a principle. Consider zoning downtown into different parking zones. The zoning has three goals; get as much car parking off streets and open spaces as possible, reduce the traffic in downtown - and do all this to raise the quality of streets and open spaces. The parking zoning aims for calming downtown and gives higher priority to pedestrians and bicyclists. Consider calming the very core of downtown the most.



ENTRANCE TO UNDERGROUND PARKING A light weight and elegant entrance to underground parking.

MULTI-STORY PARKING GET NEW FACADE

This is a very positive initiative since it transforms

the way the building meets the street. The ground

floor now has the possibility of interacting with

the street.



parking under the green square. Ventilation of the structure is integrated in the paving.





INFORMATION ON AVAILABLE PARKING Reduce parking searching traffic. Introduce parking info showing how many parking spaces are free and where they are.



PARKING FEES AS REGULATION It is possible to find parking in the centre of

downtown - if you are willing to pay. Price is raised if pressure on the most popular spaces is high. Consider weekday/weekend and seasonal pricing structures also.



PARKING AS ARTISTIC EXPERIENCE An artist has made a periscope installation, where you look down into the underground parking.



park a short time on this host of "stars," when there are no cars the pavement becomes a beautiful part of the space.

# THE LEGIBLE DOWNTOWN

## A DYNAMIC PARKING STRATEGY

The strategy must fulfill a certain parking capacity, but there is no need for over capacity. The parking strategy should minimize the surface parking lots, have the largest capacity of parking underground or in multi-story garages, and reduce on-street parking.

Make a dynamic strategy where it is possible to regulate the parking facilities. Parking fees are an efficient tool. Parking spaces in the core of downtown ought to be the most expensive. The City is collaborating with the private sector to provide an electronic parking guidance system that will make finding parking more efficient.

### FROM PARKING LOT TO PUBLIC SPACE

Transform some of the off-street parking lots to public open spaces and establish new underground parking underneath the public spaces.

# LET PARKING MAKE A DIFFERENCE

Have the parking strategy give something back to the city. High rise parking structures shouldn't ruin the visual quality of walking about in downtown.



To obtain an attractive, safe, and lively downtown, focus must be placed on the various user groups - residents, daily and seasonal visitors, plus the use and activities during the day, week and throughout the year.

# **INVITING ALL USER GROUPS**

Today downtown is somewhat office and retail focused with a large workforce coming and going every weekday during office hours. Tourist and shoppers are more seasonal visitors.

Even though crime statistics in downtown have consistently dropped in the last decade, the perception that some areas are unsafe remains. These perceptions and the reality of crimes can be addressed by inviting more people to use the areas more often and throughout the day and evening.

There is a lack of residents - young people, seniors and especially families with children - visiting and living in downtown.

### THREE GENERATORS

On the map to the right we identify three focus areas for generating more mixed-use functions and a more diverse user group. By putting a specific focus on these areas, by upgrading and adding to the range of functions, some issues with the perception of a lack of safety in downtown can be addressed.

# **NIGHT TIME NETWORK**

A night time network is also identified, linking public transport hubs with main night time activity corridors. Focus should be put on attractive facades, good street lighting, and public functions open and active at night.





Pedestrian scaled waterfront, BO01 Malmö, Sweden

Night time street with bars, restaurants, cafés, theatres, galleries and many people present, New York, US

# **GENERATOR: WATERFRONT**

The Alaskan Way Viaduct and Seawall Replacement Project creates great opportunities and the potential to redevelop the waterfront and integrate it into downtown. Bringing the city to the water with retail and restaurants/cafés/bars along a public promenade on the waterfront can ensure security, create a sense of ownership, and encourage diversity in activities and patrons.

# **GENERATOR: THIRD AVENUE**

Third Avenue is downtown's most important public transit corridor. Third Avenue should become an active night time corridor as well, inviting people to take the bus and light rail outside of business hours, with transit facilities staying open for longer hours. Establishments such as restaurants, cafés, bars, galleries, cinemas, theaters and other public-oriented businesses should be located along Third Avenue to support an active public realm into the nights and weekends.



Mixed-use downtown with a combination of housing, offices, public facilities and social services, Melbourne, Australia

### **GENERATOR: COMMERCIAL CORE**

More housing units and commerce should be introduced, especially in the eastern part of the core, to make the area more mixed-use. This task requires innovative measures to introduce new functions into the existing built form. However, this can be key in changing the area's reputation of being unsafe and unattractive and turning it into an attractive, lively and safe part of downtown.

# **FEELING OF SAFETY**

Residents and activities in downtown generally contribute to the feeling of security. The city should work towards making areas, such as many of the alleys, feel more comfrotable by introducing lighting schemes or functions to the areas.



Residents, light in the windows at night and eyes on the street creates a comfortable feeling, which is more appropriate than emergency buttons and surveillance cameras.



Evening and night time activities, plus the presence of other people encourages people to walk the streets at night instead of choosing the car.



Activities on the weekends can invite people that typically don't visit downtown. An active downtown during weekends will increase the feeling of comfort.

# **NIGHT TIME NETWORK**

Connect important night time functions in a secure and inviting network. Night time destinations, such as theaters or restaurants should be connected to the important public transit hubs via well lit streets, active ground floors or "eyes on the street."



Promote public transit at night by creating inviting, well-lit and legible transit hubs.



Introducing street lights at the human scale invites walking after office hours and gives less disturbance to the residential units on the upper floors.



Invite people to stay in downtown after work with a variety of functions, placed on the ground floor level, providing evening and night time activities that interact with the streetscape.

# **NIGHT TIME ATTRACTIONS & ACTIVITIES**

Inviting people to stay in downtown after office hours takes effort. Make sure that downtown has night time attractors, such as well lit public spaces that are not all closed to the public after 11pm.



Attractive and well-lit facades at night invite night time window shopping and walking in downtown.



Introduce a variety of uses, both public facilities and residential units to create a feeling of comfort.



Well-lit public spaces instead of dark pockets will add to the night time attractiveness of the night time network.



**RESIDENTS** - families, young people, seniors



DAILY VISITORS - workforce, shoppers



**SEASONAL VISITORS** - shoppers, tourists, business people

# A GOOD BALANCE OF USER GROUPS

Inviting residents, and thereby ensuring a good balance between residents and visitors, will be key to ensuring an attractive, safe and lively downtown since they will help populate and activate downtown outside office hours and, on weekends, invite more people to use the areas often and throughout the day and evening.



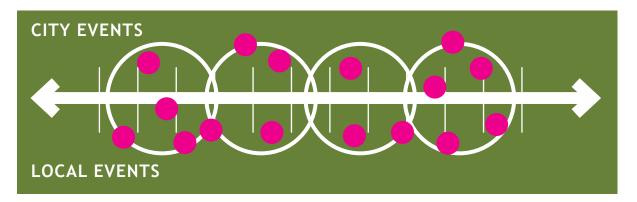
**SUMMER TIME ACTIVITIES** - inviting public realm, long staying times, relaxed behaviour, bright evenings, multiple activities.



WINTER TIME ACTIVITIES - short stops, dark nights, cold weather, beautiful days.

# **SEASONAL CHANGES**

When upgrading the public realm, it is important to consider every aspect of the climate, change of season and day. Most public spaces should pass the test of a "Tuesday night in November," meaning that it should be pleasant when it is raining and nothing is going on and not just on a sunny Saturday in July.



# **ANNUAL EVENT CALENDAR**

Many activities take place in downtown today, but only on two levels: local and city. It is very difficult to get a complete overview of what goes on where and when. By describing all the events, both recurring and occasional, in an annual event calendar, downtown can gain a powerful tool for inviting people throughout the year.

# THE DYNAMIC DOWNTOWN

# **PUBLIC / CITY INITIATIVES**

Whereas the strategies illustrated in this document tends to focus on physical improvements, the strategy for The Dynamic Downtown describes criteria for building a city culture. Listed below are initiatives to be taken by the public sector:

# SUPPORT NEIGHBORHOOD NETWORKS

Providing the base for, and initiating, neighborhood networks such as social, knowledge, and cultural networks.

### **INCENTIVE PROGRAM**

Initiate incentive programs, i.e., tax reductions or change of legislation to ensure specific downtown initiatives and development such as more dwellings for families, new green pockets etc.

# PUBLIC PRIVATE PARTNERSHIP

Encourage local business and developers to engage in public-private partnerships to ensure involvement and ownership from communities plus use of good quality design and materials when upgrading the public realm.

# **ACCESS TO PUBLIC REALM**

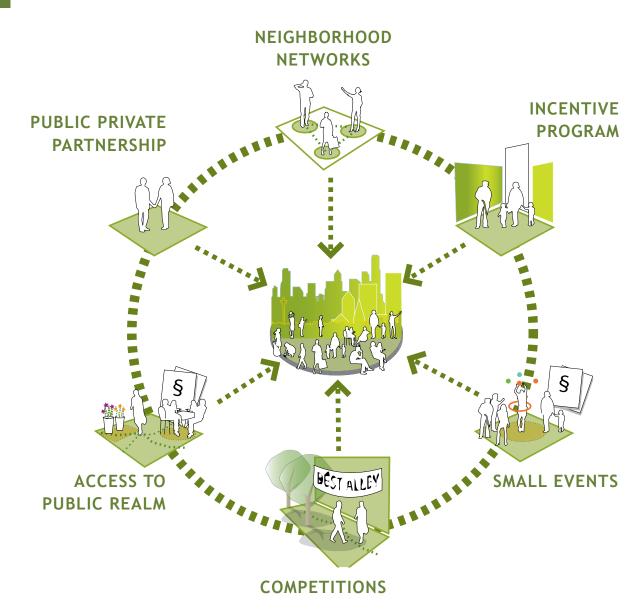
Relax legislation to ensure that cafes and restaurants can use the sidewalk and open spaces for seating. Invite more small business such as flower shops, news stands and takeout food to use the public realm.

# PROMOTE SMALL EVENTS

Relax legislation to ensure that small events can take place in the public realm. Support initiatives with public funding.

### **COMPETITIONS**

Initiate public realm competitions within neighborhoods to honor local engagement. Introduce a "Great Place Award" taking numerous factors into consideration and reward the "greenest alley," "best green pocket," "funniest playground," etc.





# THE DYNAMIC DOWNTOWN

# PRIVATE INITIATIVES

To ensure that a city culture is strengthened, including community involvement from the private sector, both local business and corporate partnerships, is essential. Listed below are initiatives to be taken by the private sector:

# **NETWORK**

Work closely with the Downtown Seattle Association, the Chamber of Commerce, and neighborhood business associations to strengthen and promote specific neighborhoods.

# **OWNERSHIP & PRIDE**

When making physical upgrades to the public realm, involve the local and private businesses in the process to ensure ownership, responsibility, engagement and pride in their neighborhood.

### **CO-FINANCING**

Encourage communities, local business and developers to co-finance new public realm projects and redevelopment of the existing public realm to ensure good quality in design and materials.

# **EDUCATION**

Work with developers to support collaboration within the neighborhood, reinforce why the public realm is important and define what makes a good public realm. Explore the importance of an active ground floor facade, mixed-use, diversity in dwellings etc.

# **COMPETITIONS**

Encourage local businesses and initiatives to introduce public realm quality awards. Reward the businesses with the best and most inviting facade, the best interaction between private and public, or initiatives that are able to invite kids or seniors.

# RECOMMENDATIONS - PUBLIC SPACE PROGRAMS KING STREET STATION MERCER AURORA **GREEN ALLEYS**



# THE MAIN STREET OF SEATTLE

The main street in a city shows the world how the city wants to be famous. What story does Seattle want to tell its citizens and visitors? What invitations and what priorities would be offered?

The transformation of First Ave into a new type of street scape, with a focus on city life and priority for pedestrians, gives the opportunity to invite more recreational street life in Seattle. If Seattle wants to be a more lively and vibrant city with sustainable urban recreation - First Ave is a good place to start.

# VISION:

- a great main street
- fantastic pedestrian connection
- · active ground floor frontages
- new streetcar line
- good connections to the waterfront
- good connections to Pike Place Market & Victor Steinbrueck Park
- good connection to Pine street & Pike street
- good connection to King Street Station & Occidental Mall
- a vibrant shopping and recreational street
- summer and wint er variation



FIRST AVENUE TODAY, 2008

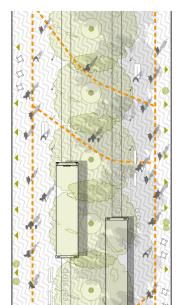
# FIRST AVENUE

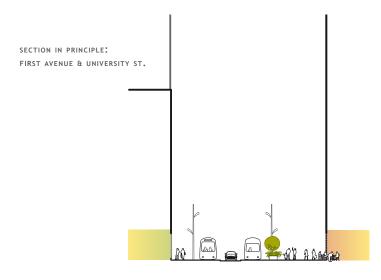
SECTION IN PRINCIPLE: FIRST AVENUE & S. WASHINGTON ST.



14′	12′	10′	12′	14′	
SIDEWALK	STREET CAR	MEDIAN	STREET CAR	SIDEWALK	

PLAN IN PRINCIPLE: FIRST AVENUE & S. WASHINGTON ST.





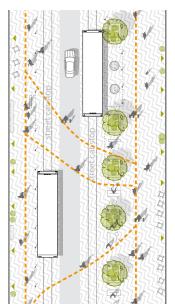
 12′	12′	10′	12′	8′	20′	
SIDEWALK	STREET CAR	CARRIAGE WAY	STREET CAR	BUFFERZONE*	SIDEWALK	•

\*BUFFERZONE:

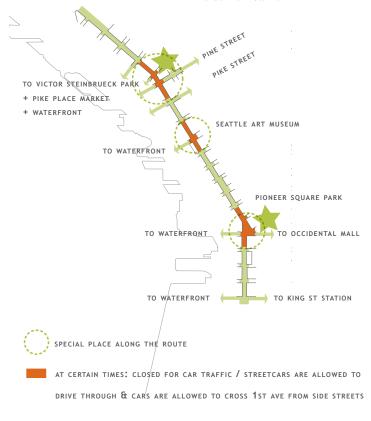
- PLANTING
- BENCHES
- STREET CAR STOPS
- BICYCLE PARKING
- SHORT TERM PARKING

PLAN IN PRINCIPLE:

FIRST AVENUE & UNIVERSITY ST.



### TRAFFIC ON FIRST AVENUE - FUTURE SCENARIO



CARS GO ALL THE WAY

When something extraordinary happens along First Avenue. it is closed for cars - but the streetcars are always allowed to drive all the way along First Avenue.

### EXPERIMENT WITH A "LIMITED DRIVE-THROUGH STREET"

Consider converting First Avenue to a limited drive-through street for cars. Streetcars go all the way through in two directions, but cars are only allowed to drive a block or two. This gives the opportunity to close part of the street to cars.

In the historic district cars are only allowed to drive on First Avenue in the same lane as the streetcar.



### RESTRICTIONS ON PARKING

Prioritize short term parking and handicap parking. Move all exits/entrances to parking garages to side streets. Set up a time frame for deliveries.

# FIRST AVENUE

# LINKS & MOVEMENT

- Extended pedestrian priority
- A streetcar in both directions
- Well linked pedestrian routes to important destinations
- Extrordinary places and pockets along the avenue
- An one-way carriage way in the middle of the avenue.
- First Avenue as a limited drive-through street meaning cars can only drive for a few blocks, before
  having to turn off of the avenue. This will drastically
  lower the driving speed and the amount of through
  traffic.
- An asymmetrical street section that celebrates and activates the sunny side of the street.
- In the future, consider closing parts of First Avenue at certain times for special occasions.

# PRIORITIZE PEDESTRIANS AND PUBLIC TRANSPORT



Make as much pedestrian space as possible, and make the street easy to cross at any time. A street car allows for an exclusive street design with delicate paving.



Wireless electric trams allow space for trees and unobstructed views.

# **ZONING OF THE STREET**



Simple distinctions between different user groups can be made with subtle pavement level changes



A change in pavement and maybe a few elegant bollards divide driving traffic from people walking.

# MAXIMIZE THE POTENTIAL



Prioritize the sunny side of the street, and create space for recreational activities. Make an asymmetric section of the street. In the historic part of First Avenue the existing planting demands a symmetric section.

# FIRST AVENUE

# FUNCTION, EDGE & ACTIVITY

# Goals for First Avenue:

- First Avenue as a recreational street
- Upgraded ground floor frontages
- · Transparent, inviting and active facades
- Extended variety along First Avenue, to be seen in the ground floor facades
- · Coffee shops and outdoor café seating
- A good street for both walking and staying





The characteristic styles and materials of the historic areas along First Avenue create a special atmosphere.



Older buildings often have a more comfortable human scale that invite relaxed, sociable uses.



Active ground floor facades soften the street scape.



# CENTRAL BUSINESS DISTRICT



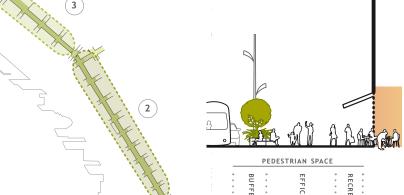
Articulate facades and introduce a greater mix of ground floor shops and activities.



Modern, high-rise buildings create a distinctive atmosphere, if the ground floors are active.



Street seating for cafes enlivens even very monotonous building facades.



EFFICIENT WALKING WIDTH 15



# **BELLTOWN**



Restaurants and cafes spill into the sidewalk space.



Cafés with outdoor seating let people see and be seen, and increase the chances of casual interactions.



Facades that feel open and transparent invite spontaneous gatherings.

### CHARACTER AND IDENTITY



**BEAUTIFUL PAVING** First Avenue will be characterised by a beautiful and consistent paving.



**CONSISTENT FURNITURE** Consistent furniture of high quality. The furniture may cover various types of seating, but from a design point of view they are all related.



**DISTINCT PLANTING** Distinct planting characterizes First Avenue. Some of the existing trees will stay in the space, but new types of planting will also be introduced.

# **EVENTS**



STREET CLOSURE Occasional closure of First Avenue could be an event in and of itself, allowing new types of activities. Street closures happen on certain streets in Tokyo almost every Sunday.



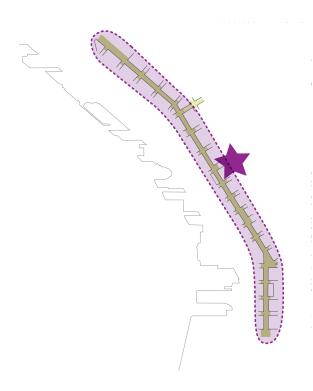
ART FAIRS Use the street as an exhibition space. Exhibitions with art pieces that invite interaction will highlight the theme of recreational street.

# FIRST AVENUE

# **CHARACTER AND IDENTITY**

### Goals for First Avenue:

- A new paving to strengthen First Avenue's character and identity - the street design is consistent
- The paving and furniture are iconic for First Avenue
- A consistent design for public benches, lamp posts and street furniture in general
- · Distinctive planting
- Introducing special events that enhance the street itself to strengthen the character of First Avenue



Create a First Avenue identity. Paving, furniture, elements and distinct planting creates its identity.

### **PUBLIC SEATING**





some of the street furniture as "talk-scapes" consisting of either benches or chairs.



paths can let people use a street in a more relaxed way.



# **WELCOME TO SEATTLE**

King Street Station is a "welcome" space for out of town visitors. It should have an exclusive design that communicates arrival in a city that is proud of its open spaces.

The King Street Station forecourt and the spaces around the transit tunnel stations are places where communication and movement are in focus. Easy wayfinding to the rest of the city and between the various modes of public transport is essential. The spaces must comply with the needs you have when you are in transit - a newspaper, coffee to go, flowers for mom, etc.

A new city square that responds to the transit spaces will become a place to sit and rest, and a green space that appeals to all ages.

VISION:

- an attractive gateway saying "welcome to seattle!"
- · public spaces with strong character and identity
- connecting the various modes of public transport:
  - king street station
  - transit tunnel and light rail
  - street level bus stops & streetcar stops
- strong pedestrian connections to the rest of the city
- transform parking area in front of king street station into a forecourt for the station.
- · cover or screen some of the openings to the train rails
- · strengthen the open spaces as transit spaces
- introduce new functions in the spaces
- build up the urban fabric
- open up & upgrade existing ground floor frontages

VISIONARY COLLAGE OF KING STREET STATION FORECOURT



KING STREET STATION FORECOURT TODAY, 2008

# KING STREET STATION FORECOURT



The King Street Station forecourt should provide a balance between surrounding historic buildings and a modern transit hub.



Introduce poetic elements that create special experiences and may change with the seasons.



The space must have a clear identity both day and night, and communicate movement.

# KING STREET STATION

# CHARACTER AND IDENTITY

Goals for King Street Station:

- A strong sense of place and a series of welcome spaces with strong identity
- · Adjacent spaces with recreational qualities
- High quality materials and design to transform the spaces into places that Seattle can be proud of

(4)

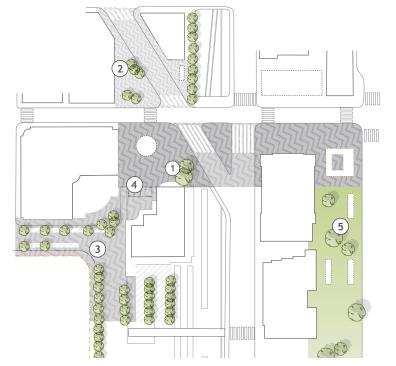
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# 2 RECREATIONAL SQUARE

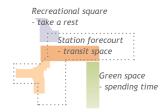




An elegant and intimate space invites people to take a break. Both commercial and public seating facilities should be comfortable and attractive.



3 TYPES OF SPACES CONVERGE.
THEY INVITE DIFFERENT ACTIVITIES
AND THEREFORE HAVE DIFFERENT
IDENTITIES.



KING STREET STATION LOWER

LEVEL

(3)



Design the space to be interesting when viewed from above



A grand stairway creates an elegant transition between different levels of the square



Introduce consistent and elegant furniture for public transport areas



A green recreational space invites both adults and children

# Goals for King Street Station:

- A well functioning transit hub
- Improved pedestrian and bicycle links
- · Improved legibility and wayfinding
- Integrated public transit systems: clear information and convenient connections
- · Great connections to the rest of the city



"Buses only" creates a quieter and more easily traversable space.



STRENGTHEN CONNECTIONS TO THE REST OF THE CITY

Historical District





Use design to communicate links and wayfinding. Distinct paving, plantings, furniture, can be used to guide people through the spaces.



Include King Street Station in the bicycle network, so it is possible to take the bicycle when going to the station.

Claire E Gear, UW Scan | Design Master Studio, fall 2008





Integrating pedestrian crossings into paving design adds elegance and introduces a hierarchy that guides users.

Improve legibility by implementing an consistent sign strategy.





**BUSES & STREETCARS** 





(1)

RECREATIONAL SPACE

STATION FORECOURT



"KISS & RIDE"



NEW PAVILION OR BUILDING

International

District

Downtown Transit Tunnel

A pavilion activates a square. It may host tourist information, public transit information, and a little café. Must be open and illuminated at night.



New building with active ground floor.



Incorporate elegant waiting facilities in the overall design. Protection from the rain and sun is important.

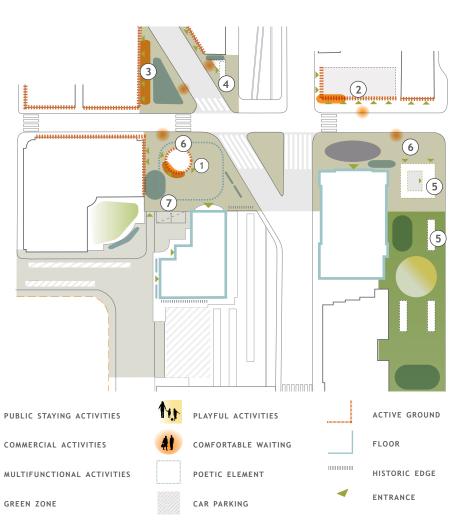
7 Car parking under deck.

# KING STREET STATION

# FUNCTION, EDGE & ACTIVITY

Goals for King Street Station:

- New edges and activities in the spaces, introduced with the placement of pavilions
- · Upgraded, open and activated ground floor facades
- · New, interesting and appealing building on empty lot
- A pleasant experience of using and waiting for public transit



Open up and activate existing facades.

Allow small pavilions selling newspapers, drinks, fruit.

Create elegant new entrances to transit tunnel stations. A kiosk/ticket booth, that remains open at night, may also be placed under the roof to the main entrance.

Provide good public seating.

"Stand up" furniture creates a comfortable short term waiting opportunity.









# **MERCER & AURORA**

### PEOPLE FRIENDLY STREETS

Mercer Street and Aurora Avenue are busy vehicular traffic routes. Therefore, they may not become popular pedestrian routes, but it is possible to make them more pedestrian friendly than today.

Mercer Street is potentially a more important pedestrian and bicycle link than Aurora Avenue. The new Mercer design will add significantly wider sidewalks, bike lanes on Valley Street and both street trees and median trees for added greenery. Develop the empty parcels along it so it is more defined with a built edge.

Let both Mercer Street and Aurora Avenue be part of a greater green system by planting more trees in this area.

### VISION:

- Mercer Street and Aurora Avenue become pedestrian and bicycle friendly links
- The new Mercer design will add significantly wider sidewalks, bike lanes on valley street and both street trees and median trees for added greenery
- Close Broad Street, cover the space and allow for urban fabric development
- Green Streets and boulevards in this part of Seattle
- · Build up the edges along Aurora Avenue
- Introduce a regular intersection at ground level on Aurora Avenue as soon as it is possible after the tunnel
- Build up the urban fabric.

# LINKS & MOVEMENT

Goals for Mercer Street and Aurora Avenue area:

- Better connections for pedestrians and bicyclists on Mercer Street.
- Better connections for pedestrians on Aurora Avenue.
   Currently, Aurora is not appropriate for cycling.
- Pleasant sidewalks and bicycle tracks.
- The area is well-connected to key destinations.



Establish continuous pedestrian access throughout the neighborhood.



Raised bicycle tracks placed next to the sidewalk.



Introduce bicycle markers at busy



Link the urban bicycle routes with more recreational ones, e.g. at Seattle Center and South Lake Union Park.

### **MERCER ST**



Mercer Street as a tree lined boulevard will provide continuity between Seattle Center and South Lake Union.



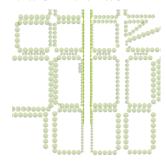
Create a boulevard with various types and scales of greenery.

### **AURORA AVE**



Aurora Avenue will still have a lot of vehicular traffic. Use greenary to create more attractive links for pedestrians.

### **NEW GREEN NETWORK**



An upgraded green grid can be accomplished in this area by adding street trees, green buffer space, and assorted sidewalk plantings.



In general, choose species of trees with variation in foliage through out the year.



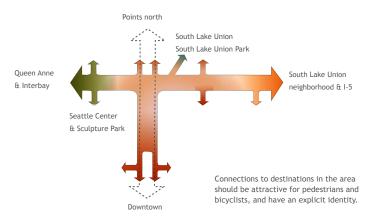
Consider introducing small pockets of green in the area. This will provide stopping places and give visual cues for wayfinding.

# **MERCER & AURORA**

# CHARACTER & IDENTITY

Goals for Mercer Street and Aurora Avenue:

- A transformed city area from suburban to a more urban and dense fabric.
- A new network of green connections and boulevards with Mercer Street and Aurora Avenue as an important part of this system.
- Local streets transformed into more pedestrian and bicycle friendly streets.

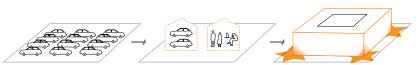


# FROM SUBURB TO URBAN STRUCTURE

A. EXISTING SITUATION

B. REPROGRAM THE PLOTS

C. BUILD UP THE URBAN EDGE



From car park to...

Program for mixed use and place car parking in garages

Build urban fabric and define streets and avenues with a build edge. Create active corners, if possible.



Build an urban edge in order to define the streets.

# **EDGES**

Goals for Mercer Street and Aurora Avenue area:

- Transform the area from suburb to urban structure develop the empty parcels
- Create a higher density area with more buildings and a feeling of an urban neighborhood.
- No large surface parking lots. Place parking in garages instead and build up the area.



# **ALLEYS AS BLUE-GREEN LUNGS**

The very intimate, small scale space of alleys contrast with the more traditional streetscapes in downtown. The greater portion of alleys today are under-utilized and some feel dirty and uncomfortable. Post Alley is the exception. At the moment, the alleys lower the quality of downtown although they actually have potential to improve the quality.

Alleys may become the new blue-green lungs of downtown by putting a focus on sustainability. Alleys may work as small ecological systems of their own; introducing more greenery, taking care of drainage and filtration of water and separating waste. The blue-green theme may be combined with art and temporary events, so the alleys also become creative semi-public spaces. Not all alleys must be transformed, as there is a need for continued functionality for service and access, but some alleys may have a more attractive atmosphere in the future. Recently, the city has started the Clear Alleys Program that facilitates the removal of large dumpsters, freeing up space for more pleasant activities.

Sarah Ferreter, UW Scan| Design Master Studio, fall 2008

## VISION:

- TRANSFORM SOME OF THE ALLEYS INTO BLUE-GREEN LUNGS
- CREATE GREEN CORRIDORS AND OFFER OPPORTUNITIES FOR DAILY CONTACT WITH NATURE, INSERT NATURAL DRAINAGE ELEMENTS TO ADDRESS LOCALIZED HYDROLOGICAL ISSUES.
- UPGRADE LIGHTING AND PAVEMENT MATERIALS, RETHINK WASTE STORAGE AND COLLECTION SYSTEMS, AND PROVIDE SPACE FOR ART INSTALLATIONS AND TEMPORARY EVENTS.
- INTRODUCE ACTIVITIES AND USES THAT ENHANCE THE

  DOWNTOWN EXPERIENCE AND MAKE THE ALLEYS SAFE, ACTIVE AND

  MULTIFUNCTIONAL IN ALL SEASONS AND TIMES OF DAY.
- COMBINE SERVICE FUNCTIONS AND RIGHT OF WAY WITH GENERAL UPGRADING, LIGHTING, AND GREEN ELEMENTS



Heide Martin, UW Scan| Design Master Studio, fall 2008



TYPICAL ALLEY TODAY

The following pages may be seen as a toolbox of ideas for the potential blue-green alleys. As inspiration we have chosen to represent some of the University of Washington Masters Students' ideas for alleys generated during their studio course in fall 2008. (See www.courses.washington.edu/gehlstud.)

### **TONES OF GREEN**



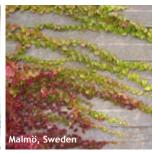
Alleys as lush green walkways. Josho Somine, UW Scan| Design Master Studio, fall 2008

# Amsterdam

Let the alleys be spaces for private initiative.



Simple frameworks for plants.



Vines with seasonal interest.

# TONES OF BLUE



Water wall with artistic lighting.



Steam as an artistic interpretation of water.



Collect water and make it an extra ordinary experience at the same time.



**Left:** Heide Martin, UW Scan|Design Master Studio, fall 2008

# THE FLOOR



Let the alleys be creative and surprising.



Pavement interpreted in a new way.



Playful paving designs - and still permeable.

# ART AND ELEMENTS



Heide Martin, UW Scan| Design Master Studio, fall 2008



Installing art on all dimensions.



Inventive, delightful seating.

# **IDENTITY & CHARACTER**

# Goals for alleys:

- Blue-green alleys with different tones of blue (water) and green (plants)
- Take it to its fullest extent if it is green, let it be really green!
- Combine the practical features (water recycling, waste collection, etc.) with an artistic approach
- Let the alleys be playing fields for local artists
- Let the alleys be places for experiments: test fresh design ideas, materials and colors
- Make it possible to watch the seasons turn

# **ALLEYS**

# LINKS & MOVEMENT

# Goals for alleys:

- · Create inviting entrances by upgrading building corners and gateway to the alleys
- Extend Post Alley further
- · Certain alleys, including Post Alley, ought to be accessible only to pedestrians, but fire trucks must have access
- · Where there are parking garage entries or loading docks, cars may share alley space
- Be strategic when upgrading alleys. Start with alleys that support important pedestrian routes, eg., 1st Avenue, Pine Street and Pike Street
- · Introduce special lighting

# LIGHTING



Attractive lighting will make alleys feel safe and unique.



Alley with playful lighting.

# MODES OF MOVEMENT





Bicycling and walking...

# **ENTRANCES & ALLEY CORNERS**



Selina Hunstiger, UW Scan|Design Master Studio, fall 2008



Sarah Ferreter, UW Scan| Design Master Studio, fall 2008



Entrances can offer intrigue and a feeling of comfort at the same time. Michael Pickford, UW Scan| Design Master Studio, fall 2008



Copenhagen, Denmark

Vehicles designed to fit the narrow spaces.

### WATER CATCHMENT AND PLANTING



Simple frameworks for more green.



School children conducting biological experiments.



Collecting water.



Permeable pavement slows run-off and allows infiltration during rain storms.

### **BLUE ALLEY**



A blue theme in alleys where buildings heights only allow little light penetration and therefore make it difficult to grow big plants. These alleys will mostly function as interesting walkways.

# **GREEN ALLEY**



Green lungs in alleys where the width of the space and buildings heights allow for some sun penetration. Some of these alleys may work as recreational spaces also.

# **ALLEYS**

# **FUNCTIONS & EDGES**

# Goals for alleys:

- Improve downtown ecological infrastructure, while providing urban nature experiences
- Improve alleys as clean spaces and eliminate odors from waste
- Install small-scale water catchment and filtration systems in alleys to contribute significantly to the quality of storm water run off entering Elliott Bay
- · Introduce bike parking
- Attract birds, butterflies and pollinating insects to these green spaces

### IDEAS FOR USES:



RECYCLING

DELIGHT & PUBLIC ART

ACTIVE CORNERS & FACADES

PUBLIC SEATING

BICYCLE PARKING

### **RECYCLING WASTE**



Clean, attractive recycling bins.



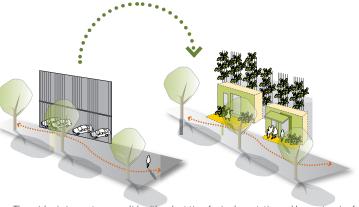
Alternative waste infrastructure with possibilities of sorting different types of waste.

**OUICK WINS** 





First Avenue today; the ground floor facade of a parking garage does not add to the quality of walking or staying.



The quick win is easy to accomplish with a short time for implementation and low cost, going from an inactive and uninviting ground floor facade to an attractive, inviting and active facade.

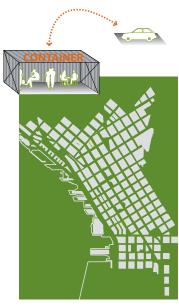
# A quick win; introducing small business units in the closed facade to activate the street scape.

# **ACTIVE FACADE**

An overall strategy is to ensure active and inviting facades on all avenues in downtown.

The quick win approach is to identify the ground floor facades of parking garages, facing avenues, and turning them into active parts of the street scape.

- Take away 16 parking stalls facing the street
- Place 4 containers that can open onto the street
- Ensure water, electricity and heat for each container
  unit
- Invite 4 small businesses preferably 24/7 such as hairdresser, flower shop, news agent, and music shop
- Ensure low rent for businesses, no direct competition to existing businesses, transparent facades at night and extended businesses hours



A number of ground floor facades throughout downtown have been identified for this possible quick win; active facade

# **GREEN POCKET**

An overall strategy is to convert all the east west streets in downtown to "Green connectors."

The quick win approach is to focus on the sidewalks, not the ground floor facades, as they are often challenged by the topography.

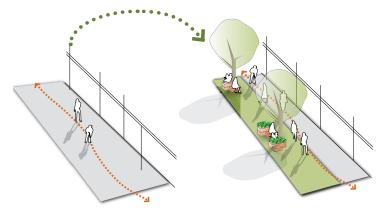
- Ensure a clear, walkable zone along the sidewalk
- Introduce street elements that invite people to sit, stand, wait, pause, meet and enjoy the view
- The street elements should be locally designed and produced with materials that relate to Seattle as a green city
- Introduce green street elements, trees and typical Seattle species for planters



East west streets with challenging topography and inactive street scapes in downtown have been identified for possible quick wins; green pocket



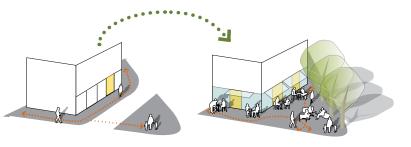
Typical east west street today: closed facade, no green and no invitations to rest, pause or sit.



The quick win is an exercise of activating part of the sidewalk for "green pockets," preserving views, easy pedestrian access and flow plus introducing places to rest and pause.



Space with great potential - today used for parking cars.



The quick win is an exercise of re-purposing open space in downtown with potential for becoming a "people space" instead of a "car space."



A quick win; introducing permanent opportunities for public life to unfold in space previously preserved for cars

# **RE-PURPOSED SPACE**

An overall strategy is to ensure more "people space" in downtown.

The quick win approach is to identify the places in downtown with potential for becoming permanent well-functioning and inviting public space, by only adding a few elements, taking out cars or closing slip lanes for traffic.

- · Identify potential places
- Work with property owners/agencies to develop a new purpose
- Invite the local "front-runners" artists, non-profits, architects and designers to engage and implement permanent but flexible-, sustainable, low cost interventions
- Focus on small interventions and urban acupuncture, on the edge, experimental, new
- Focus on seasonal uses 24/7/12 to invite a wide range of user groups



# **TEMPORARY TRANSFORMATION**

An overall strategy is to create more invitations in downtown for people to visit and re-visit.

The quick win approach is to focus on temporary, preferably non-commercial, weekend- and holiday events in the open spaces, that during the week functions as surface parking spaces in downtown.

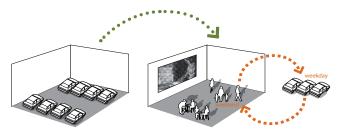
This can only happen if collaboration between the private owners of the spaces, downtown organizations, and the city is encouraged.

- Limit the access to surface parking during weekends and public holidays
- Invite different players around the table, such as theaters, students, artists and various downtown organizations to create different happenings, events and invitations in these spaces
- Focus on seasonal uses 24/7/12 to invite a wide range of people
- Identify an annual calendar for the events taking place - where and when





Typical surface parking on a potential building site, waiting to be developed — not offering any quality to the public realm.



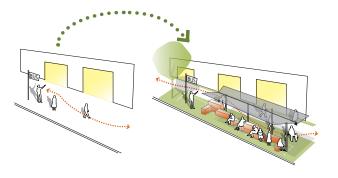
The quick win is an exercise of identifying places for temporary -and ever changing events and aiming invitations at people to visit downtown, outside office hours.



A quick win: introducing a temporary weekend playground on a designated part of a surface parking lot



Today; a Second Avenue bus stop with no shelter or opportunities to sit.



The quick win is an exercise of upgrading the experience of using public transport and introducing quality to the public realm.



A quick win; introducing great waiting facilities for transit on Second Avenue.

# **UPGRADED BUS STOP**

An overall strategy is to invite more people to use public transport in downtown.

The quick win approach is to focus on the actual bus stops in downtown. To upgrade the experience of using busses when waiting; provide shelter and different opportunities for waiting.

- Introduce clear zoning of the sidewalk; an edge zone relating to the facade, a pedestrian movement zone and a waiting zone
- Provide shelter, signage, and seating, preferably incorporated into the facade of the adjacent building
- Introduce information stands that tells the time, gives information on when next bus arrives and the network
- Introduce great lighting



# **INSPIRATION**

BARCELONA, LYON,
MELBOURNE, COPENHAGEN,
NEW YORK, MALMO, OSLO, HELSINGBURG



# INSPIRATION FROM BARCELONA



#### TWO DIFFERENT OCCASIONS AND POLICIES:

#### 1. A DEMOCRATIC SOCIETY AND PUBLIC SPACES

The policy to create new public spaces for free meeting and talking was formulated in Barcelona after the fall of the dictatorship of general Franco. The new democratic government that came to power in the first free elections in 1979 promoted new public spaces to give inhabitants immediate improvements in living conditions and open up democratic discussion.

#### 2. THE OLYMPIC GAMES AND THE CITY PLAN

The Olympic Games in 1992 was used as a great opportunity to make large-scale improvements to the city. Investment was used to drive development of the city plan, where unfinished parts were completed and derelict industrial sites were transformed into new city districts. In this way, Barcelona got new sports arenas but also a new district of housing with a leisure harbour connecting new city districts to the beach along the coast.

#### PUBLIC SPACE POLICY PROFILE

Barcelona has been pioneering public space policies, where a great number of imaginative new designs have been applied across the city.

New public spaces in each neighbourhood for people meeting, talking, discussing, playing and unwinding.

The public space policy has been called "projects versus"

#### DEMOCRATIC AND PIONEERING PUBLIC SPACE POLICY

BARCELONA, SPAIN / 3.5 MILLION INHABITANTS (GREATER BARCELONA)

planning" as it turned the traditional planning methods upside down by focusing on what independent small projects can do for a city district - and for a whole city. Instead of waiting for the grand coordinated master plan to be developed, the city has been implementing public spaces - even where no spaces existed - by tearing down derelict buildings, using old railroad yards, or renovating existing spaces. Without any great need of coordination, these projects improved the city for inhabitants. No standard designs but "tailor-made" solutions place-byplace, involving a great number of local designers. With the slogan "the gallery in the street", contemporary sculptures have been an integrated part of the public space program with the dual intention of giving each place its unique character and to create discussions between local people.

#### DISTRIBUTION OF PUBLIC SPACES

Hundreds of projects in many different scales, from major parks to local piazzas, or just a little corner with a couple of trees and a bench standing on a fine new urban floor, are spread over the whole surface of the city. It functions like a kind of urban acupuncture, where the whole body of the city becomes better without a great need for coordination of projects.

#### **PUBLIC SPACES AND TRAFFIC**

Initially the public space policy was not an integrated part of any major traffic plan and in most cases projects were made without taking space from driving and only a few of the many spaces have underground parking garages as part of the new designs. Later projects with more traffic and parking emphasis have been emerging, such as parks on top of freeways.

#### TYPES OF PUBLIC SPACES

Barcelona has developed a wide range of public space types from small hard scapes in the form of piazzas, to large parks that function like "green oases", often established on derelict land or former industrial sites. Promenades and other types of new interpretation of the rambla motif are frequent as well as a series of spaces dominated by gravel and soft shapes, mostly for playing. In this city with high density in both building mass and in traffic volumes, all the different types of open spaces are highly appreciated.

#### ORGANIZING THE TASK

The city created a new office called Servei de Projectes Urbans to work with new projects in the 10 city districts. Meetings are held with local people in each district as part of the process, and architects at the office coordinate the technical and administrative aspects of the project. There are a large number of local architects from private practice working in collaboration with - and doing projects for - the office.

#### **PROCESS**

The new democratic city council selected Oriol Bohigas as a city councillor for urban design. Bohigas was both the director of the School of Architecture and partner of a major private practice, and he formulated the general approach. The results show an interesting relation between the public and private sectors, as the public investments in new city spaces were followed up by property owners renewing surrounding buildings. The early projects were designed after architects' competitions and later the office for public space design was put into place to work continuously with the projects.

#### **RESULTS**

The idea of reconquering public spaces was formulated in Barcelona as a political idea of providing democratic space as well as a vision for re-creating the art of making public spaces. Nowhere in the world can the viewer see so many different examples of new and experimental designs of parks, squares and promenades in a single city as in Barcelona.

### POETIC, COORDINATED AND SOCIAL PUBLIC SPACE POLICY

LYON, FRANCE / 1.3 MILLION INHABITANTS (GREATER LYON)

#### **POLICY PROFILE**

The public space planning is coordinated with social policy with the aim of creating "a city with a human face" and a city for all its inhabitants. Equality and balance between projects in the Inner City and in suburban districts are underlined, for instance by giving the same architect the commission to design public spaces in both the centre and the suburbs.

Three different types of plans have been developed: A green plan, which focuses on the city's public spaces, a blue plan that deals with the way the city meets the rivers, and a "yellow" plan, a lighting plan. The latter addresses the character and quality of lighting of monuments and other buildings as well as the streets, squares and parks. It is also a tool for collaboration between the public and the private sector in relation to the quality of lighting in different locations.

Lyon is actively supporting smaller shops in the inner city by stopping all further development of out-of-town shopping centers.

#### **DISTRIBUTION OF PUBLIC SPACES**

Projects are spread over the city, with a balance between the Inner City and suburban districts.

#### **PUBLIC SPACES AND TRAFFIC**

In order to create a human face to the city, the traffic policy is aiming at putting car parking underground. Many of the renovated spaces in the centre of the city have 4 to 6 stories of parking garages under the car-free surface of the public space. A partly public and private firm has been established to build and run the new parking structures. New light rail lines and a metro are giving alternative forms of transportation.

#### TYPES OF PUBLIC SPACES

Most of the renovated public spaces in the Inner City were existing "classical rooms" in the historic city fabric, whereas the spaces in the suburban districts were "free floating" spaces between high-rise housing blocks. These suburban spaces had to be redefined and redesigned for new uses, thus creating new types of public spaces.

#### FIXED SET OF MATERIALS & FURNITURE

A "Lyon vocabulary" of materials to be used in the spaces has been developed, particularly to underline the identity of the city but also to limit the number of materials to be maintained. To stress the equality between different districts, the same street furniture can be found in suburban housing projects as well as in central city spaces.

#### ORGANIZING THE TASK

The city created two new organisations to cope with the coordination of public space policy. On the political level an organisation called "Group de Pilotage Espaces public" was formed, headed by the mayor. This group, with representatives from all departments involved in the process, meets once or twice a month. A parallel interdisciplinary organisation called "Group Technique de Suivi", with experts from all departments, is meeting every week to prepare and coordinate the technical and practical sides of the implementation of the plans.

#### **PROCESS**

As a response to the deteriorating quality of the public realm under the pressure of a growing number of cars entering the city centre, combined with social tension between suburbia and down town, one of the mayors, Henry Chabert, formulated the policy to create a city with

# INSPIRATION FROM LYON



"a human face" (or surface) in 1989.

Poets and other artists have been asked to generate the spirit of the place, the genius loci, before the brief is given to the architects or landscape architects who were designing the spaces.

A large number of public meetings and interaction with the local people are other characteristic elements of the process, which has also aimed to create a good interaction between the private and public sectors.

#### **RESULTS**

Lyon suffered an industrial decline in the 1970's, but has reformulated its role and become a very dynamic city. The policy has changed the appearance and image of the city, with a large number of high quality public spaces.

# INSPIRATION FROM MELBOURNE



#### **POLICY PROFILE**

The City of Melbourne's design philosophy was first outlined in the 1985 Strategy Plan that called for the city to build on its existing strengths in a manner that reflected Melbourne's local character, while diversifying uses within the central city to transform it from a central business district to a central activities district. Melbourne's existing strengths and physical patterns were identified and later elaborated upon in Grids and Greenery. Published in 1987, Grids and Greenery provided a vision for the future of Melbourne.

Alongside its early strategic vision and directions, Council developed urban planning and conservation controls, broad-perspective master plans and guidelines, as well as detailed action plans, street scape plans and street furniture technical notes. Council also instigated retail, events and arts policies and programs, as well as strategic initiatives and project partnerships including Postcode 3000 to encourage residential living back into the city.

#### DISTRIBUTION OF PUBLIC SPACE

Since 1985, City of Melbourne's urban design program has been implemented throughout the municipality, although high-profile projects have generally been concentrated in the central business district, Southbank, and most recently, Docklands.

#### **PUBLIC SPACES AND TRAFFIC**

A principal objective of Melbourne's urban design program has been to reduce car dominance in the street while

#### URBAN TRANSFORMATION INTO A PLACE FOR PEOPLE

MELBOURNE, AUSTRALIA / 3.6 MILLION INHABITANTS (GREATER MELBOURNE)

establishing a more inviting public realm for people. To achieve this, Council has undertaken an incremental but consistent process of pedestrianisation through the installation of high-quality bluestone paving, street furniture, trees, newsstands, and kiosks, complemented by a policy for more active street-level building frontages. Such physical improvements have created a safer, more inviting and engaging public realm. The area of pedestrian space has increased through footpath extensions, most significantly in Swanston Street and little streets such as Flinders Lane. Temporary lunchtime road closures provide pedestrians with a less congested through-route in Little Collins Street. In addition to improving public space for walking and social interaction, Melbourne has sought to promote sustainable transport alternatives to reduce emissions and traffic congestion, and to ensure the public realm is inclusive and accessible to all people. While streets within the city centre do not have formally dedicated bicycle lanes due to the competing demands for road space, the closure of Swanston Street to daytime through-traffic has established it as a popular north-south cycle route.

#### TYPES OF PUBLIC SPACE

The City of Melbourne has aimed to enlarge the public realm and pedestrian networks with a broad range of public space types through: (1) the establishment of main public spaces such as Bourke Street Mall, City Square, Federation Square, and waterfront promenades including Southgate; (2) small-scale spaces established by re-claiming surplus road space; and (3) works to upgrade existing streets and laneways.

#### A STANDARD SUITE OF MATERIALS & FURNITURE

The City has created standardised designs for a wide range of street furniture in order to improve street scape amenity with attractive, durable, functional and unobtrusive elements that complement the urban culture, character and significance of each street. Melbourne's bluestone pavement program, founded on the city's traditional materials, has ensured that repaving successfully fits into both contemporary and historic settings.

#### PROCESS AND ORGANIZING THE TASK

In the 1980s, Melbourne's citizens spoke out about the slow destruction of their city. Inappropriate international style developments, the invasion of the automobile, destruction of heritage areas and general decline of the central city saw new political forces emerge at both a State and Local Government level. Their success at the polls allowed them to reset the agenda for Melbourne.

Commencing in 1985, the City of Melbourne's urban design department developed a comprehensive planning and design policy framework that defined a simple vision to transform Melbourne's ailing central business district into a central activities district, while retaining the physical characteristics that were distinctive to Melbourne. This vision was adopted and has been gradually implemented through ambitious but achievable targets over the past two decades.

Using in-house professional skills, the City of Melbourne has worked to lead rather than just manage the city's transformation. It has mastered the art of successful partnerships and directed the resources of other levels of government and the private sector towards improving the public realm through such projects as Federation Square and QV.

#### **RESULTS**

Council's urban design program has been instrumental in inspiring, directing and accelerating the process of revitalising Melbourne through a gradual but consistent transformation of streets, lanes and other spaces into public places that are engaging and diverse. This is evident from population and economic growth. Since 1994, there has been a staggering 830% increase in city residents, and this has been accompanied by a significant rise in pedestrian volumes and the number of people choosing to spend time in the public realm. The follow-on effects include revived street use patterns as the community utilises the city as its recreational, retail and entertainment base, and this has been highly influential in creating a more vibrant, safer, and sustainable 24 hour city.

#### A BETTER CITY - STEP BY STEP

COPENHAGEN, DENMARK / 1.3 MILLION INHABITANTS (GREATER COPENHAGEN)

#### **POLICY PROFILE**

Copenhagen's step-by-step policy covers a zone where a series of policies are applied to create better conditions for soft traffic and people on foot.

Public spaces are seen as a network of streets that link with public transit and a series of piazzas or squares that open up for different activities and urban recreation.

#### DISTRIBUTION OF PUBLIC SPACE PROJECTS

Early projects were all in the historic core of the Inner City. Later, local spaces in the outer districts of the city were developed and, more recently, new spaces have been established along the waterfront.

#### **PUBLIC SPACES AND TRAFFIC**

Bicycle lanes and bicycle priorities in different forms have been applied throughout. Access to the Inner City is possible by car but driving through is restricted, so walking or cycling is easier.

In the Inner City most of the public spaces are part of traffic calming measures and a series of different types of street designs have been applied from pedestrian-only, to pedestrian-priority streets and to streets with other limitations for driving.

No new parking structures have been established in the Inner City for some years and kerb side parking has been reduced by an average of 2-3% annually. Surfaces have been converted to accommodate other people-oriented activities.

New metro lines have been built recently to give better access to the Inner City from some of the new development areas of the Oerestad, a new town being built close to the city centre.

#### **TYPES OF PUBLIC SPACES**

The new public spaces in the Inner City consist of renovated existing "rooms" in the historic city, all with a modest and fine human scale. The spaces are mainly streets and squares, which through time have got different functions as "living rooms", "dining rooms" for staying activities or "corridors" for strolling along as part of urban recreation.

#### ORGANIZING THE TASK

For many years the design of public spaces has been taken care of by the City Architect's office, while the City Engineer's office, paved and maintained them. In recent years the organisational structures at Copenhagen City Hall have been reorganised and an office established especially for public space design and policy.

#### **PROCESS**

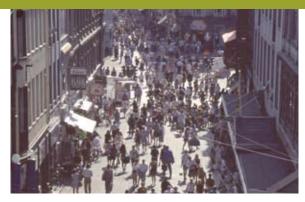
The policies have been emerging gradually from early experiments with the first pedestrian streets in the 1960s to the 1980s, where consistent and coordinated policies were formulated.

Copenhagen has changed gradually through the last 30 to 40 years, from a city dominated by cars to a city centre for daily life for people on foot.

#### **RESULTS**

Copenhagen Inner City has gained the reputation of being a fine place for urban recreation, where each new step has increased the quality for people on bicycles and on foot. These qualities of life are part of the reason that a growing number of people want to live in the centre of the city, where new housing has been built along the harbour fronts. Copenhagen has also experienced a general development

# INSPIRATION FROM COPENHAGEN



from the first pedestrianisation years, where public life revolved around walking and shopping, to a more developed city culture where the number of mixed activities increase and where people spend four times as much time as before the redevelopment schemes started. The public money invested in renovating public spaces has been paid back through an increased number of tax payers in the city more residents - and an increased turnover for city-based businesses. The general image of Copenhagen has changed towards a much more attractive city as a base for larger corporations and businesses in general.

# INSPIRATION FROM NEW YORK

#### PUBLIC LIFE SURVEY IN NEW YORK CITY

In 2007, as a part in the PlaNYC, a long term plan to create a greener, greater New York started. New York City DOT contracted with Gehl Architects to conduct public life surveys of selected sites around the city. The study's data provides information on where people walk and what they do when stationary, either as part of daily activities or for recreational purposes. The study also analyzed the quality and condition of outdoor seating, the quality of paving materials, construction-related impacts and other qualitative factors that affect the public realm. Results from the public life survey helped formulate much of New York's strategy for improving streets as public spaces, and can serve as a baseline against which future surveys can be compared.

#### THE VISION

One of the challenges PlaNYC poses to city agencies is to "re-imagine the City's public realm" — to develop an urban environment that transforms the streets and squares into more people-friendly places. This is to be done through new initiatives such as; Broadway Boulevard, the Public Plaza Program, Coordinated Street Furniture, Summer Streets and initiating the beginning of a 1864 miles (3000 km) city-wide bicycle network.

#### THE PROCESS

The process in New York has been gradual: first re-claiming the space from automobile use whenever possible, simply by lying out colored asphalt and furnishing the spaces with chairs, tables and umbrellas and creating protection from passing cars by introducing a heavy green planter. Later fazes will include up-grading to more permanent materials and creating an activities and identity program in the existing spaces on Manhattan but also expanding the program to all of New York's five boroughs.

See example of the Madison Square transformation.

#### THE PROCESS OF GETTING STARTED

NEW YORK, UNITED STATES / 8,274,527 MILLION INHABITANTS (GREATER NEW YORK CITY)



MADISON SQUARE BEFORE, AUGUST 2007 Madison Sq with street layout and traffic.



www.nyc.gov/html/dot/downloads/pdf/World\_Class\_Streets\_Gehl\_08.pdf



MADISON SQUARE JULY 2008 Madison Sq is closed for traffic and becomes pedestrian zone.



MADISON SQUARE SEPTEMBER 2008 Madison Sq with new surface, flower pots and a café. Madison Sq transformed into a recreational space



MADISON SQUARE SEPTEMBER 2008 Madison Sq seen from above.



HUMAN SCALED WATERFRONT VÄSTRA HAMNEN, MALMO, SWEDEN

The housing exhibition in Malmo in 2001 was a good occasion for converting the industrial harbour, Västra Hamnen, into a new mixed-use area. The Swedish architect Klas Tham was Master planner on the project.

Three elements were essential in the master plan: sustainabilty, climate protection and a public waterfront promenade.

- All buildings were designed for energy efficiency, with the widespread use of alternative energy.
- Västra Hamnen is placed in a windy place along the shoreline. Negative effects of the harsh climate are minimized due to the uneven, dense street layout and the placement of higher buildings behind them for wind protection. An intimate and human scaled environment is created, and it is possible always finding a comfortable space outdoors.
- All ground floor units along the waterfront promenade may be converted for other functions than dwellings, eg. commercial activities, because of high ceilings.
- The waterfront promenade is very popular and it has an intimate and comfortable scale. The promenade secure good walking conditions and create many invitations for recreational activities.



A LIVELY WATERFRONT AKER BRYGGE, OSLO, NORWAY

Today Oslo has a lively harbour front area where there once was a ship yard. The construction of Aker Brygge, as the area is called today, started in 1985. Some of the old and beautiful shipyard buildings are still standing within the contemporary architecture.

Aker Brygge is a mix-use waterfront with restaurants, shops, cultural institutions, offices and dwellings. The car free area has a cozy atmosphere and has become very popular in Oslo.

Aker Brygge has a lively waterfront promenade with high quality public spaces throughout the area. The public spaces are carefully planned to optimize views to the water and take advantage of the sun's orientation. All important ground floor facades are active.

The buildings have a vertical variation in uses, so all most all buildings have both commercial activities, offices and dwellings.

# INSPIRATION FROM WATERFRONTS



WELL CONNECTED WATERFRONT HELSINGBURG, SWEDEN

The former industrial harbour was transformed into a new housing area in 1999. The master plan was made by the Danish architectural office Tegnestuen Vandkunsten. The master plan places all buildings perpendicularly to the water's edge, thereby providing every apartment with a view to the water. This also establish good accessibility from the city center to the waterfront.

Cafés and shops occupy the ground floor units along the waterfront promenade. All parking is underground and is placed in between the houses with public spaces on top.

The houses are designed by different architects in order to create variation, but adhere to a solid design framework so as to establish a coherent building style.

# REFLECTIONS

BY GEHL ARCHITECTS



# **REFLECTIONS**

#### PARADIGM SHIFT IN PLANNING

With the current global crisis - economic, environmental, social and health - there is a need for a new way of understanding and executing city planning.

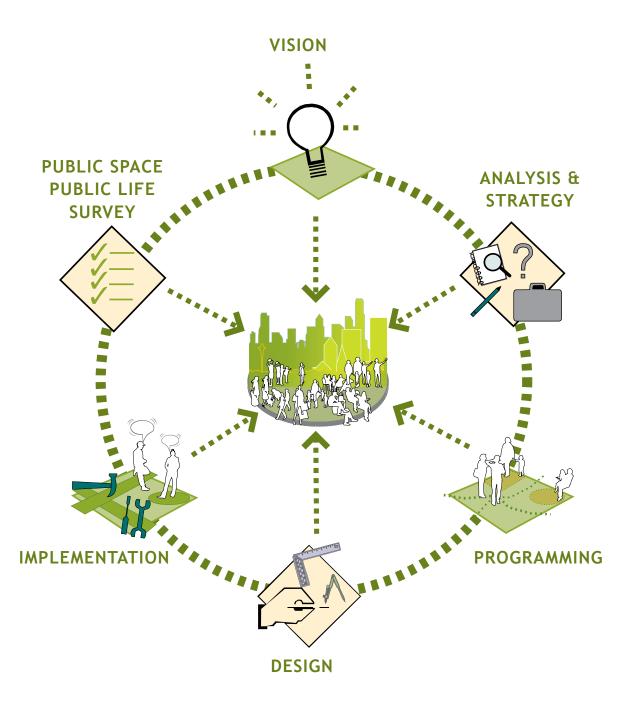
City planning needs to move away from traditional master planning with a fixed result, where the development of infrastructure and transit is separated from the quality of the public realm and the public life of cities. Instead there is a need to think holistically about mobility, flexibility, sustainability, and proximity and start identifying frameworks and qualitative tools to steer the process of developing our cities.

Focus needs to be put on people first and only when that is fully understood and implemented can we move away from the modernistic mind-set of separating functions and users, where the car becomes king, and towards cities that are attractive and livable for people.

#### **SENSE OF URGENCY**

The time for this paradigm shift is now and we need to be able to see the effects of this within the next five to ten years, to keep our cities as preferred places for people to live, visit and enjoy, and just as important to be able to attract a valuable workforce and businesses to our cities.

Most urgently, the time for a change of mindset is now, in order for our cities to be sustainable - not only in environmental and economic terms, but also in social terms. The cities need to be able to sustain a healthy and attractive way of living.





# **REFLECTIONS**

#### HOW

Our cities need to become learning and livable cities that puts people in the centre of planning.

Clear values and visions need to be identified as overall goals to move towards. With those in mind analysis identifying potentials and challenges can be carried out and strategies on how to move towards the vision illustrated. Before an actual design phase it is important to describe qualitative criteria, not dependant on design, through a programming phase.

In this process there is a constant need to carry out evaluations and quality assurance to keep learning, to develop and experiment, and asking the questions: is the vision still clear, has the conditions for public life improved and how. This should be an ongoing continuous process, always with people in the centre of planning.

#### PUBLIC SPACE PUBLIC LIFE SURVEY AS A TOOL

The Public Space Public Life Survey is an incremental and data driven approach to identifying challenges and way to go, and the surveys can in this process act as a qualitative tool on two levels.

City level: If repeated city wide every 10 years, the survey can help steer the direction of the overall city development, and to keep focus on the overall vision - are the initiatives effective, are the goals for public life fulfilled, is the city moving in the right direction.

Project level: When developing and implementing new projects in the city the survey can act as quality assurance, if executed before and after implementation.