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Pavement to Parks
Spring 2014

OPPORTUNITY MAPPING
SAN FRANCISCO PARKLETS & PLAZAS
I. Introduction
II. Preliminary Findings
III. Methodology
IV. Analysis
V. Conclusions
VI. Questions
Pavement to Parks seeks to test the possibilities of underused areas of land by quickly and inexpensively converting them into new pedestrian spaces.
The World of Parklets, Plazas, and Other Temporary Programs

Pavement to Parks has influenced and been influenced by a number of cities across the globe.

Tactical Urbanism  Mike Lydon, Street Plans Collaborative
Generous Urbanism  Blaine Merker, Rebar

Living Innovation Zones (SF), Lent Space (NYC), DUNE (Paris)
Why study parklets and plazas?

**Pavement to Parks** is a young program and its projects are new concepts for which there are many basic unanswered questions. An empirical analysis has never been done before, and can be used in the selection of future proposals.
Research Questions

Which Supervisor Districts contain the most parklets?

How has Pavement to Parks grown since 2009?

What is the relationship between parklets and NCDs?

Should the location of parklets be limited by street grade?

In what land use and zoning mixes do parklets emerge?

What areas of the city are served by parklets or plazas? Which areas are not?

Which demographics do parklets and plazas serve in San Francisco?

Where do parklets serve best as a public seating space?

Where are the best opportunities for future parklets and plazas?

In what land use and zoning mixes do parklets emerge?
Research Questions

Which areas of the city are served by parklets or plazas? Which areas are not?

Which demographics do parklets and plazas serve in San Francisco?

Where are the best opportunities for future parklets and plazas?

In what land use and zoning mixes do parklets emerge?
Parklets in San Francisco

PROPOSED: All parklet proposals ever submitted

Opportunity Mapping: San Francisco Parklets & Plazas. Presentation delivered at the San Francisco Planning Department on May 29, 2014 by Gene Stroman
Parklets in San Francisco

PROPOSED: All parklet proposals ever submitted
INSTALLED: Currently in the ground
Parklets in San Francisco

PROPOSED: All other parklet proposals ever submitted
INSTALLED: Currently in the ground
PIPELINE: In some stage of design, permitting
P2P Plazas in San Francisco

**INSTALLED:** Currently in the ground or being upgraded

**PIPELINE:** In some stage of design, permitting

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P2P Projects

Parklet and Plaza Count as of March 2014

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2009

Pavement to Parks established; First RFP

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2010

4 Pilot Parklets Installed

2009 2010 2011 2012 2013

Installed
Proposed

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2011
2012

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As the program continues to expand, P2P needs to be methodical and fair in its selection of future proposals.

# of Installed Parklets set to double within 12-24 months

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PRELIMINARY FINDINGS
Parklets by Supervisor District

Some parklets have been partially funded by Supervisors.

Coordinate P2P outreach with Districts with lowest parklet counts so that parklets are evenly distributed across city.
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Coordinate P2P outreach with Districts with lowest parklet counts so that parklets are evenly distributed across city.
Coordinate P2P outreach in Neighborhoods with lowest parklet counts so that parklets are evenly distributed across city.
Coordinate P2P outreach in Neighborhoods with lowest parklet counts so that parklets are evenly distributed across city.
The majority of parklets are on a street with <5% slope

P2P is experimenting with building parklets on more extreme slopes
Only a small number of Parklets fall along San Francisco's bike network.

**Access by Bicycle**

- **Bike Lane**: striped, marked, and signed lanes for bicycle travel
- **Bike Path**: off-street multi-use path
  - shared travel lane marked and signed for shared use
- **Bike Route**: shared travel lane marked and signed for shared use

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Most parklets are within a named NCD or NCT

Installed: 36
Pipeline: 24

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Most parklets are sponsored by cafes or restaurants

P2P should diversify parklet sponsor types in future RFPs.
Tables & Chairs v. Parklets

Tables and Chairs provide private seating, while parklets provide public seating.
While some businesses apply for both permits, the majority of parklet sponsors do not have table and chair permits.
METHODOLOGY
What is the difference between the two types of buffering techniques? Why use a Network Buffer?
A Buffer uses a straight radius in its calculation of a walking distance.
A **Network Buffer** uses the existing street network and incorporates turns, inclines, and other factors in its calculation of walking distance.
Network Buffers create a more precise, realistic walking distance away from a certain point.
Determining Walkshed

A Walkshed is the distance one feels comfortable walking to an amenity.

Parklets & Plazas
- 1/8 mi. (3 min) walkshed for Parklets
- 1/4 mi. (5 min) walkshed for P2P Plazas

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SF General Plan: Recreation & Open Space Element
http://www.sf-planning.org/ftp/general_plan/Rec_and_Open_Space.htm

Congress for the New Urbanism Charter

Manhattan East Side Open Space Index
http://www.nycp.org/research/esi/EastSideOSI.pdf
Determining Walkshed

Should Open Space have only one Walkshed value?

Open Spaces: Natural Areas, Parks, Plazas, Mini-Parks, Playgrounds, Green Strips, Street Parks, Community Gardens, POPOs, Piers, Wharfs

Open Space Classifications:
- Citywide Serving: 1/2 mi. (10 min)
- District Serving: 3/8 mi. (8 min)
- Neighborhood Serving: 1/4 mi. (5 min)
- Sub-neighborhood Serving: 1/8 mi. (3 min)
Buffer | multi-ring

Multi-ring buffer (5 and 10 min.) on Installed Parklets

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Final (3 min.) Buffer on Installed Parklets
Buffer | open space

Buffer on all Open Space by Classification

Open Space Classifications:
Citywide Serving: 1/2 mi. (10 min)
District Serving: 3/8 mi. (7 min)
Neighborhood Serving: 1/4 mi. (5 min)
Sub-neighborhood Serving: 1/8 mi. (3 min)
Buffer on Open Space + Plazas
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Buffer | final

Final Buffer
Final Buffer v. Pipeline Parklets
The simple buffer takes over most of the city, leaving far too small of an opportunity area. A network buffer can produce a more realistic catchment area that will include more pipeline parklets.
Network Buffer | installed

Network Buffer (3 min.) on Installed Parklets

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Network Buffer | plazas

Network Buffer (5 min.) on P2P Plazas

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Network Buffer | open space

Network Buffer on all Open Space by Classification

Open Space Classifications:
- Citywide Serving: 1/2 mi. (10 min)
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Network Buffer | open space

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Network Buffer on Open Space + Plazas

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Network Buffer

Network Buffer on Open Space + Plazas+ Installed Parklets

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Network Buffer | priority pipeline

Priority Pipeline Parklets

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ANALYSIS
Q1: In what land use and zoning mixes do parklets emerge?
Parklet Walkshed Network Buffer

Network Buffer on Parklets
Parklet Walkshed Network Buffer

All blocks within Parklet Network Buffer

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Compared to city as a whole, service area for parklets includes a greater percentage of Residential Mixed Use and Retail/Entertainment Land Uses.
Compared to the city as a whole, the service area for parklets includes a greater percentage of Commercial Zoning.
Q2: Which areas of the city are served by parklets or plazas? Which areas are not?
Blocks Served / Not Served
Blocks Served / Not Served

**Access**: population within the associated walkshed of an installed parklet, P2P plaza, or open space.
Access: population within the associated walkshed of an installed parklet, P2P plaza, or open space.

83% of San Francisco’s land area has access to open space, parklets, and plazas.

Access: 83%
No Access: 17%

Q3: Which demographics do parklets and plazas serve in San Francisco?
### The Census & GIS

<table>
<thead>
<tr>
<th><strong>Decennial Census (2010)</strong></th>
<th><strong>American Community Survey (2012)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Race, Age</td>
<td>Income, Education, Transportation</td>
</tr>
</tbody>
</table>

- Short survey (fewer categories)
- Samples entire population every 10 years (less frequent)
- Larger population sample
- Smaller geographic unit: blocks and block groups

- Long survey
- Samples small percentage of population every year
- Less accurate (data is an estimate, includes margin of error)
- Larger geographic unit: Census Tracts

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_Opportunity Mapping: San Francisco Parklets & Plazas. Presentation delivered at the San Francisco Planning Department on May 29, 2014 by Gene Stroman_
Decennial Census Data (Blocks)
Parklet Walkshed Network Buffer

Network Buffer on Parklets

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Populations served by parklets reflect that of the city as a whole.
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ACS Data (Census Tracts)
Populations served by parklets reflect that of the city as a whole.
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Populations served by parklets reflect that of the city as a whole.
CAPPUCINO URBANISM?
Q4: Where are the best opportunities for future parklets and plazas?
Opportunity Streets

Network Buffer

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Opportunity Streets

Street Segments in “No Access” areas
Opportunity Streets

Street Segments with a grade of less than 5%
Opportunity Streets

Street Segments within a named NCD or NCT

**OPPORTUNITY STREETS =**
- Are within areas of the city that do not currently have access to parklets, plazas, or other types of open space
- Have a street grade of less than 5%
- Are within an NCD, NCT, or other NC

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Opportunity Streets v. Pipeline Parklets
Conclusions

- The parklet program is growing every year. P2P should ensure geographic equity in its selection of future proposals.
- The distribution of parklets is uneven across Supervisor Districts and Neighborhoods. P2P should coordinate more closely with the entities with lowest parklet counts to ensure geographic equity.
- Most parklets are within an NCD or NCT and are streets with grades of less than 5%.
- Only a small number of parklets fall along San Francisco’s bike network.
- Most parklet sponsors are either cafes or restaurants. P2P should diversify sponsor type in future RFP selection.
- The majority of parklet sponsors do not also have table and chair permits.
- Compared to city as a whole, the service area for parklets includes a greater percentage of Residential Mixed Use or Retail / Entertainment Land Use and is within a Commercial Zoning District.
Conclusions

- 83% of San Francisco has access to open space, parklets, and plazas. The other 17% is where P2P should build future parklets.
- Despite criticism about parklets serving only specific populations, populations served by parklets reflect that of the city as a whole, meaning that ALL populations are served by parklets.
- The best opportunity areas for parklets and plazas are along streets that:
  - Are within areas of the city that do not currently have access to parklets, plazas, or other types of open space.
  - Have a street grade of less than 5%.
  - Are within a named NCD or NCT.
Further Research

Q: How does population density affect the opportunity study for parklets and plazas?

Q: What makes a successful parklet? (Design, accessibility, side of street, sponsor type?)

Q: At what locations can a parklet most benefit a neighborhood?

Q: How do people arrive at parklets? Further explore link with bicycle infrastructure and SF’s Green Connections program.

Q: Prove / disprove the assumption that people will only walk a few blocks to use a parklet

Q: Does street slope affect the popularity / effectiveness of a parklet?
Questions
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