



TRANSIT CENTER DISTRICT PLAN

TJPA CAC

Section 295 Actions Related to the Plan and the
Transbay Tower (101 1st St.)



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DEPARTMENT

10.09.2012

San Francisco Planning Department

In partnership with:

Successor to the San Francisco Redevelopment
Agency

Transbay Joint Powers Authority

Transit Center District Plan Milestones



May 24, 2012
Planning Commission adoption

July 31, 2012
Board of Supervisors adoption

August 8, 2012
Mayor Lee signature

September 7, 2012
Plan and Zoning Effective

October 11, 2012

- **Joint Hearing re: 1989 Memo and Plan**
- **Rec Park Commission action on Transbay Tower**



October 18, 2012
Planning Commission Hearing on Transbay Tower Approval

TCDP: A Comprehensive Plan

- **Realization of Downtown Plan goal to shift growth South of Market around Transbay Transit Center**
- **Statewide symbol of sustainable transit-oriented growth**
- **\$590 net new public revenue**
- **Over \$424 M for Downtown Rail Extension**
required to meet SF's \$450M obligation
- **\$159m for open space**



Plan Open Space Program



Plan would help create and fund 12+ acres of new public open space in an area with no public parks...

...and provide an additional \$12.5 million from new impact fees for open space improvements *outside of the Plan Area:*

- **\$9m for Chinatown parks**
- **\$3.5m for other Downtown parks**



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Downtown Rail Extension Funding Plan

- DTX elevated to regional New Starts priority in MTC's Regional Transportation Plan (RTP)
- Draft RTP approved May 17, 2012

New Starts	\$ 650,000,000
Bridge Tolls	\$ 300,000,000
High Speed Rail	\$ 557,000,000
San Francisco Obligation	\$ 450,000,000
Total	\$ 1,957,000,000



Transit Center District Plan: Heights



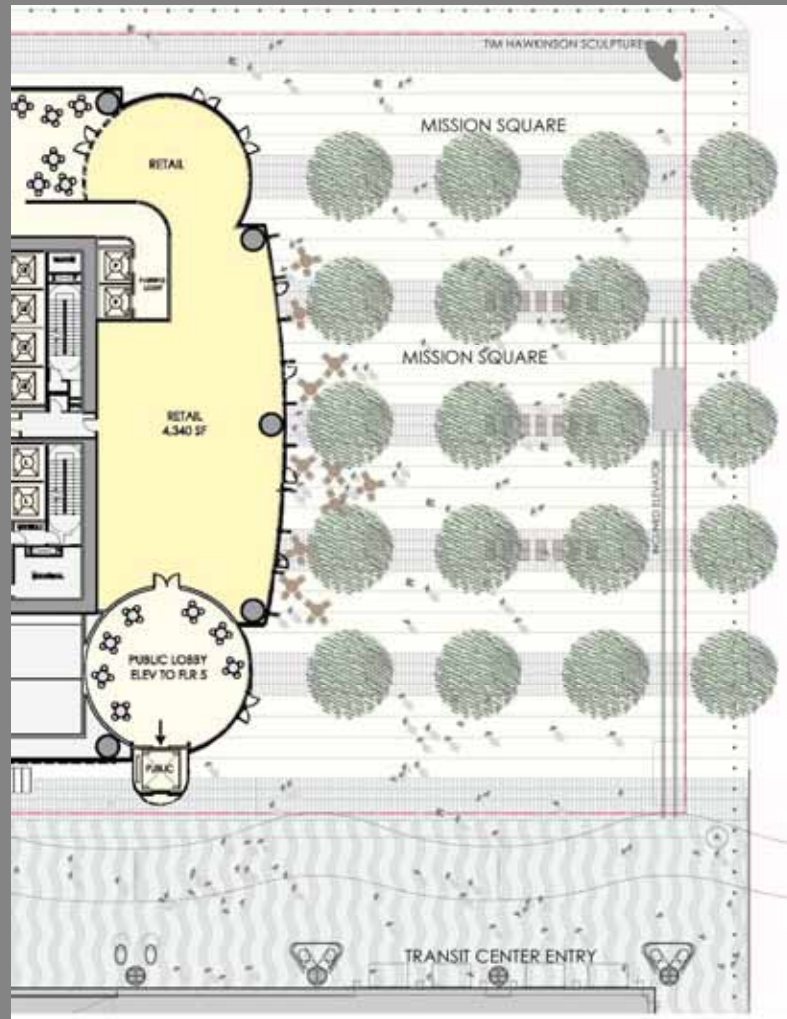
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Transbay Tower



- Largest single development in TCDP
 - Substantial revenues for
 - Open space
 - Affordable Housing
 - Transportation
- Land sale funds Transit Center
- Transit-oriented development
- Spire on skyline

Transbay Tower



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- \$2m for open space outside of TCDP
- 24,000 sf Mission Square
- Connections to City Park

Section 295

Section 295 requires that the Planning Commission disapprove any new building that would result in net new shadows that create

“...adverse impact on the use of the [park]...unless it is determined that the impact would be insignificant.”

To create criteria for such evaluation, Section 295 requires that

“The City Planning Commission and the Recreation and Park Commission, after a joint meeting, shall adopt criteria for the implementation of the provisions of this Section.”



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1989 Implementation Memo

Qualitative Criteria for Evaluation of Shadows on All Parks:

- *Time of day and year*
 - *Size of shadow*
 - *Location in park, park features*
 - *Duration of shadow*
 - *“Public good” of projects*
- Quantitative limits or mechanism not specified in or required by Section 295 or Prop K.
 - Quantitative Absolute Cumulative Limits (aka “ACLs” or “budgets”) established for 14 parks in the downtown area at the discretion of the joint Commissions



Absolute Cumulative Limits (ACLs)

1989 Memo:

3 parks ACL > 0%

11 parks ACL = 0%

Maritime Pl. (0%)

Portsmouth Sq. (0%)

St. Mary's Sq. (0%)

Boedekker Pk. (0%)

Willy Wong Plgd. (0%)

Sgt. Macaulley Pk. (0%)

Huntington Sq. (0%)

Gene Friend Rec Ctr. (0%)

Sue Bierman Pk. (0%)

Washington Sq. (0%)

North Beach (0%)

Union Sq. (0.1%)

Justin Herman Pl. (0.1%)

Civic Center Pl. (1.0%)

- In deciding whether/where/how to assign ACLs, Commissions considered overall open space distribution, existing and pending plans
- Almost exclusive focus north of Market Street



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Absolute Cumulative Limits (ACLs)

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Willy Wong Plgd. (0%)

Sgt. Macaulley Pk. (0%)

Huntington Sq. (0%)

Gene Friend Rec Ctr. (0%)

Sue Bierman Pk. (0%)

Washington Sq. (0%)

North Beach (0%)

Union Sq. (0.1%)

Justin Herman Pl. (0.1%)

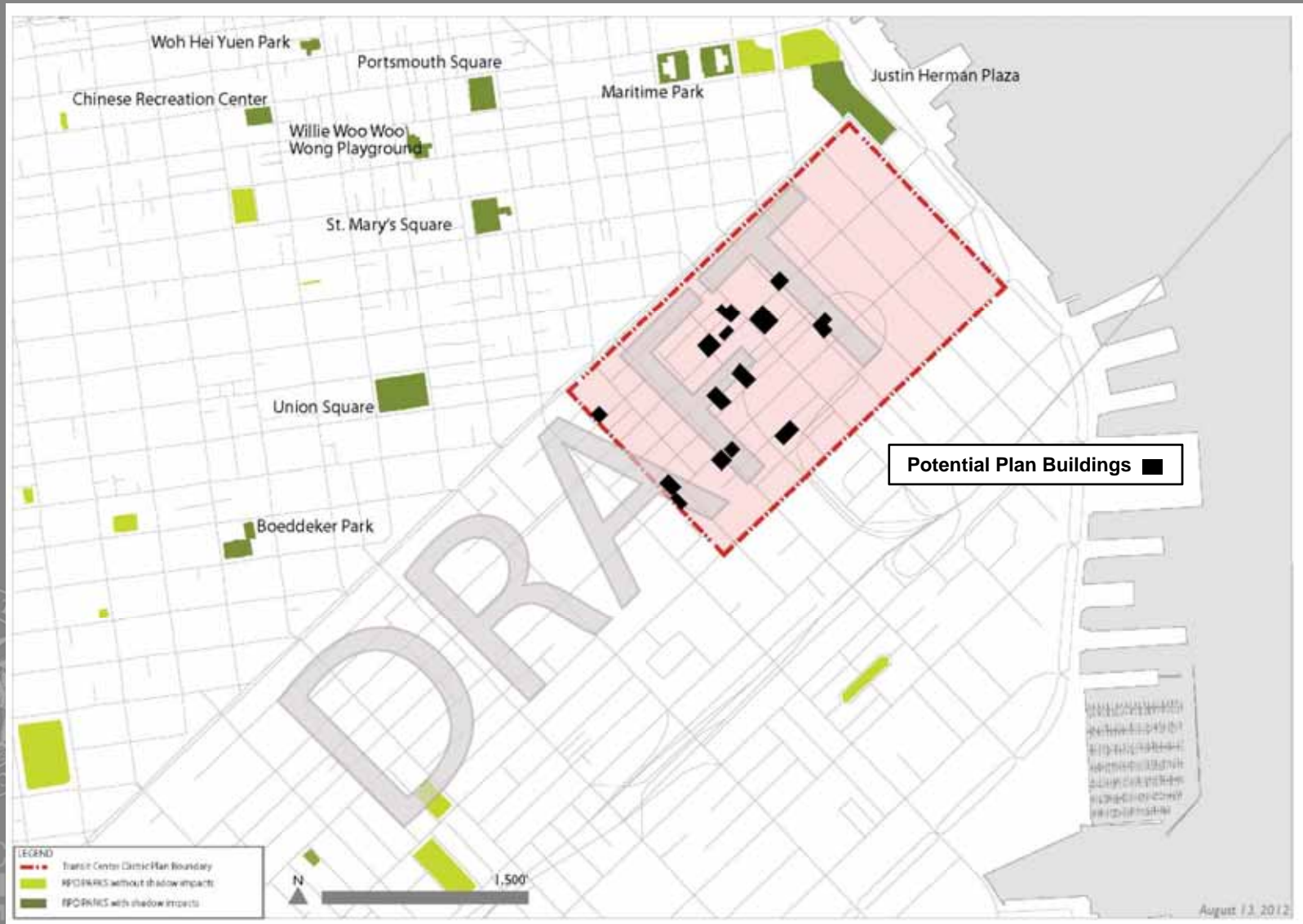
Civic Center Pl. (1.0%)

- In deciding whether/where/how to assign ACLs, Commissions considered overall open space distribution, existing and pending plans
- Almost exclusive focus north of Market Street
- Since 1989, 25 projects have been approved that add shadow to parks and joint Commissions have amended Memo on nine occasions to raise ACLs on **six parks**



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Shadow Analysis



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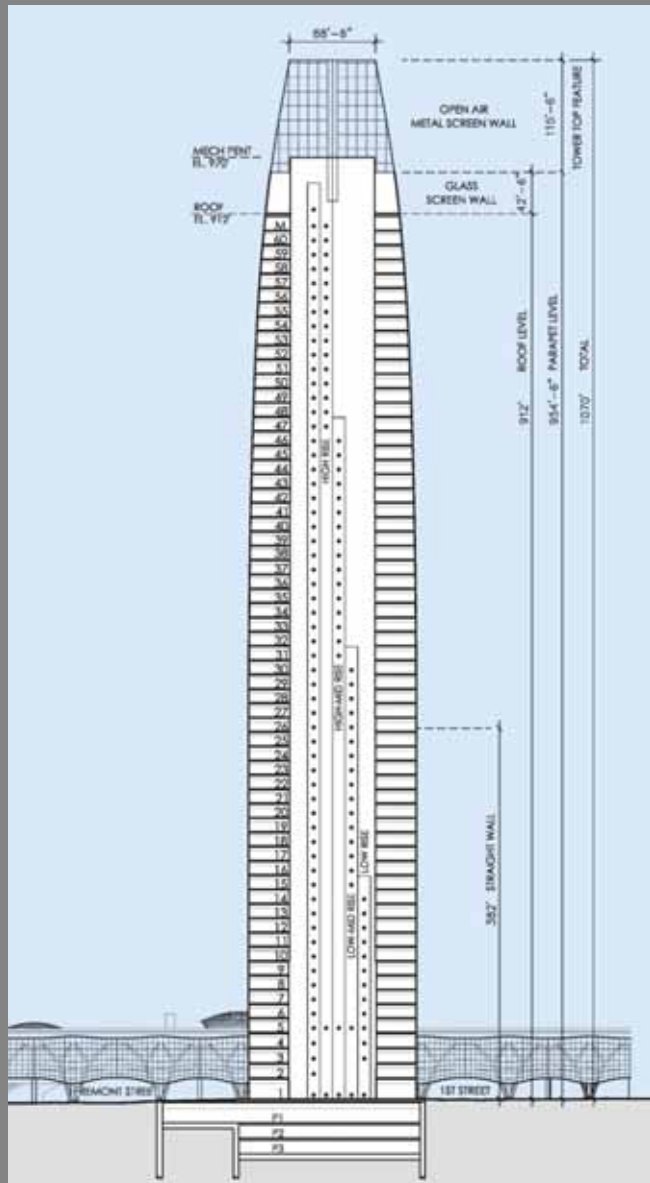
Downtown Parks

Plan Area Buildings would add net new shading to the following 9 parks,
7 of which have ACLs:



Open Space	Existing Shadow ¹	Permitted Shadow ²	Plan Shadow ⁴
Union Square ⁷	38.30%	0.1% (0.08%)	0.19%
St. Mary's Square ⁸	51.90%	0.0%	0.09%
Portsmouth Square	39.00%	0.0%	0.41%
Justin Herman Plaza ⁹	37.60%	0.1% (0.007%)	0.09%
Willie "Woo Woo" Wong Plgrd.	52.80%	0.0%	0.03%
Maritime Plaza	68.40%	0.0%	<0.01%
Woh Hei Yuen Park ¹⁰	n/a	n/a	<0.01%
Chinese Recreation Ctr.	n/a	n/a	<0.01%
Boeddeker Park ¹¹	37.70%	0.244% (0.000%)	<0.01%

Transbay Tower



- Shadows cast on eight Section 295 parks
- Mostly before 8:45am, short duration
- Diffuse shadow from sculptural top
- Height reduced from 1,200 feet
- Small increases in shadow amounts:

Union Square	0.011%
St. Mary's Square	0.048%
Portsmouth Square	0.133%
Justin Herman Plaza	0.046%
Maritime Plaza	0.004%
Woh Hei Yuen Park	0.001%
Chinese Recreation Center	0.008%
Boedekker Park	0.003%

General Considerations: TCDP

Shadows reach these distant parks generally in early hours in certain months when the sun is low in the sky.

As a result...

- Shadows from Plan buildings ***sweep quickly*** through the spaces and generally last for ***no longer than 5-60 minutes during a few weeks each year***
- Because the parks are such a far distance from the buildings, the shadows are ***more diffuse than if the buildings were close-by or immediately adjacent to the spaces.***

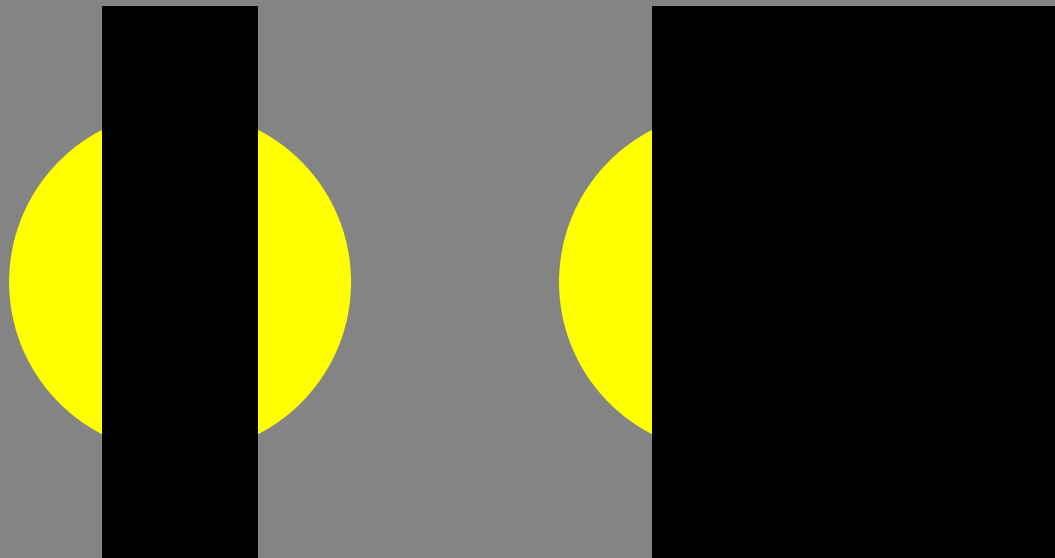


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Diffusion of Shadows

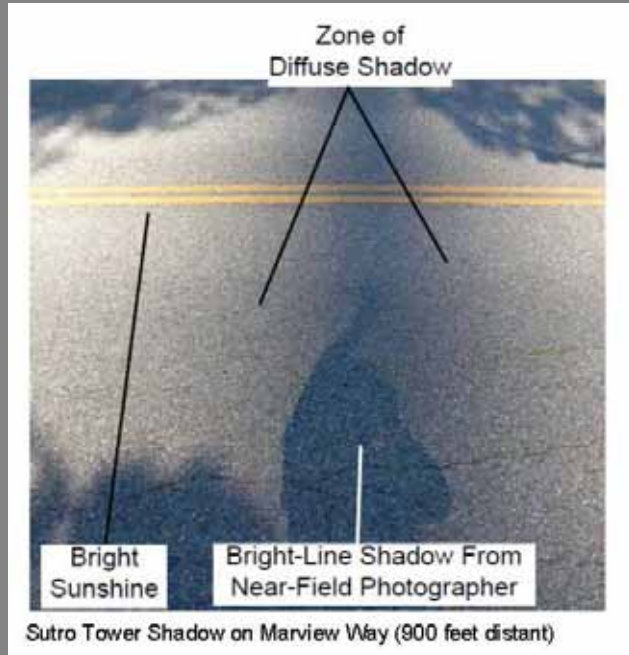
Shadow analysis assumes the sun is a point in the sky and therefore the sun is either obscured or not, and all shadows are equally dark and discernible.

However, the sun is a wide disc, often partially or almost fully shining around structures.



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Diffusion of Shadows



SOURCE: Environmental Science Associates

Figure C&R-6

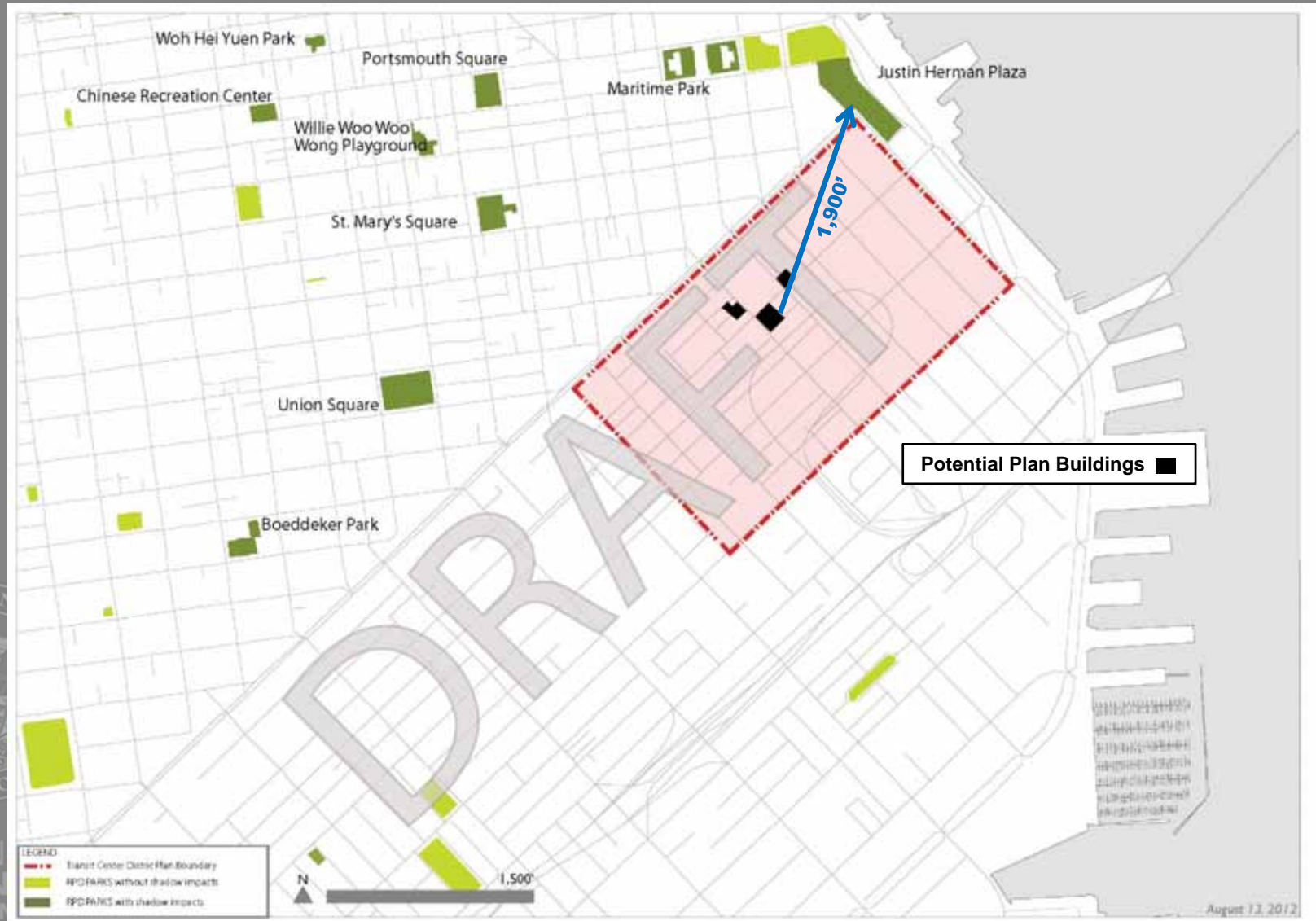
Diffuse Shadow Cast by Transamerica Pyramid, December 6



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This “diffusion” is greatest when the structure is far away or narrow in profile. Nearby object cast darker shadows with harder edges. Sunlight and shadow intensity are a spectrum.

Justin Herman Plaza



Justin Herman Plaza

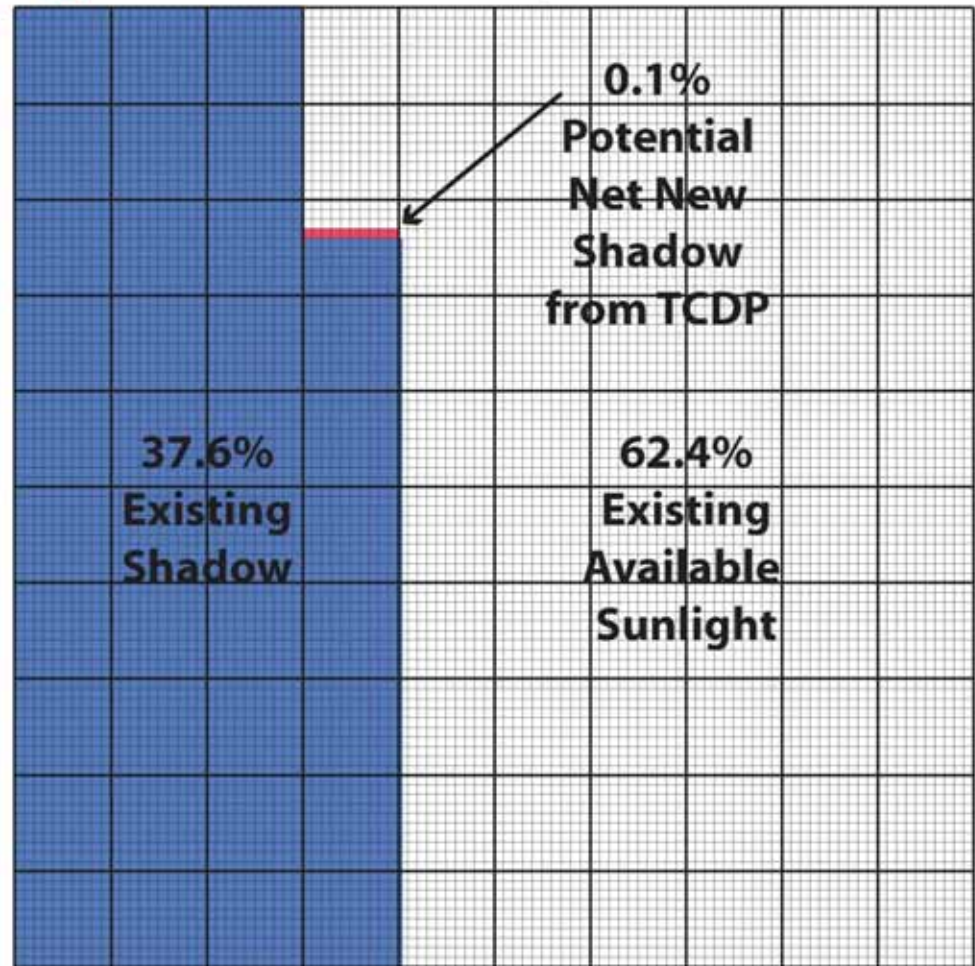
Time of Year:
Early November through
early February

Duration:
15-50 minutes

Time of Day:
Between 1:00-2:40pm

JUSTIN HERMAN PLAZA ANNUAL AVAILABLE SUNLIGHT HOURS

- 62.4% = Current available sunlight as a percentage of total annual hours of potential sunlight*
Each large box represents 1% of potential annual available sunlight
- 37.6% = Existing shadow load
- 0.1% = Potential net new shadow load from all future buildings in the Transit Center District Plan



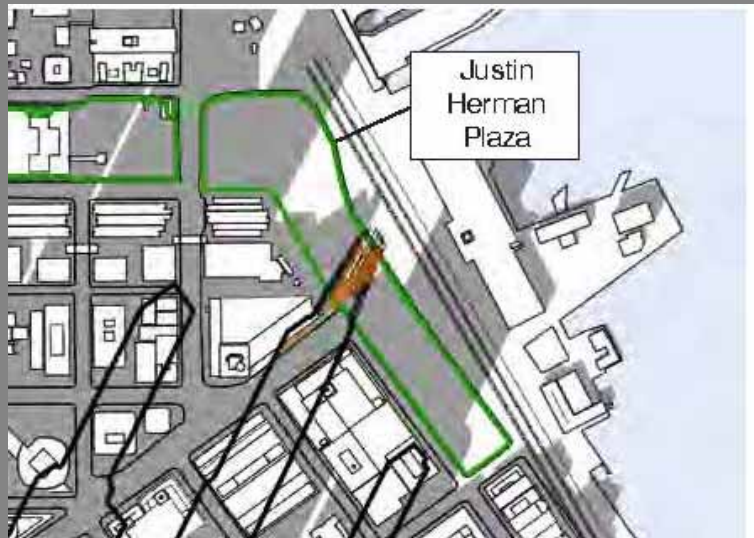
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Justin Herman Plaza

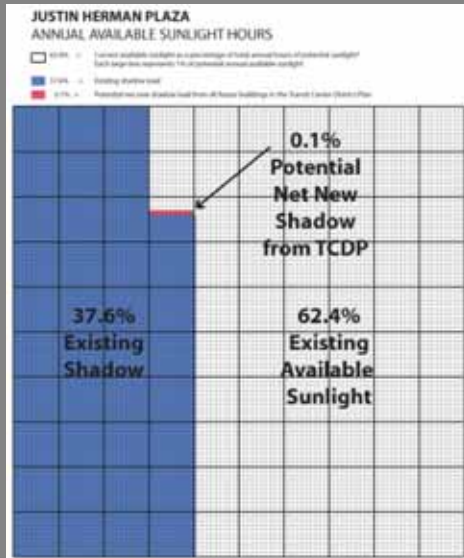
Time of Year:
Early November through
early February

Duration:
15-50 minutes

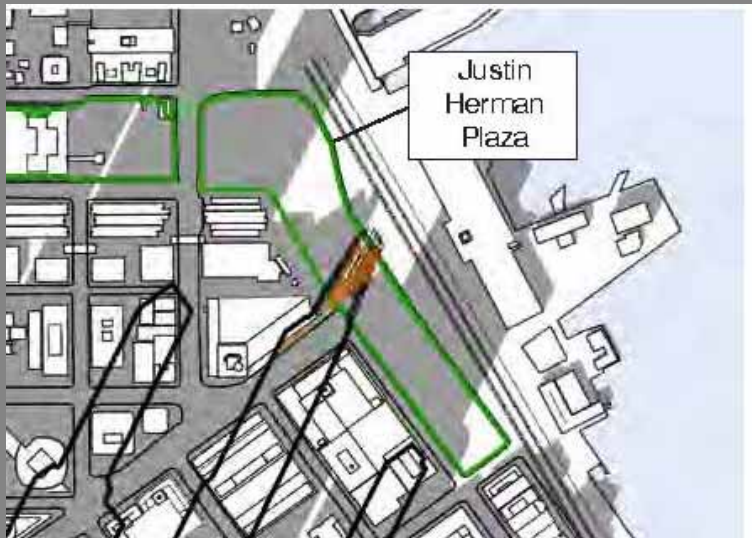
Time of Day:
Between 1:00-2:40pm



Justin Herman Plaza: Findings



- Many heavily shaded areas are also heavily used
- New shadow would fall on mostly circulation and sporadically used informal seating areas
- New shadow would be primarily cast by unenclosed sculptural top of Transit Tower and likely to be diffuse if apparent



Current Available ACL:

0.007%

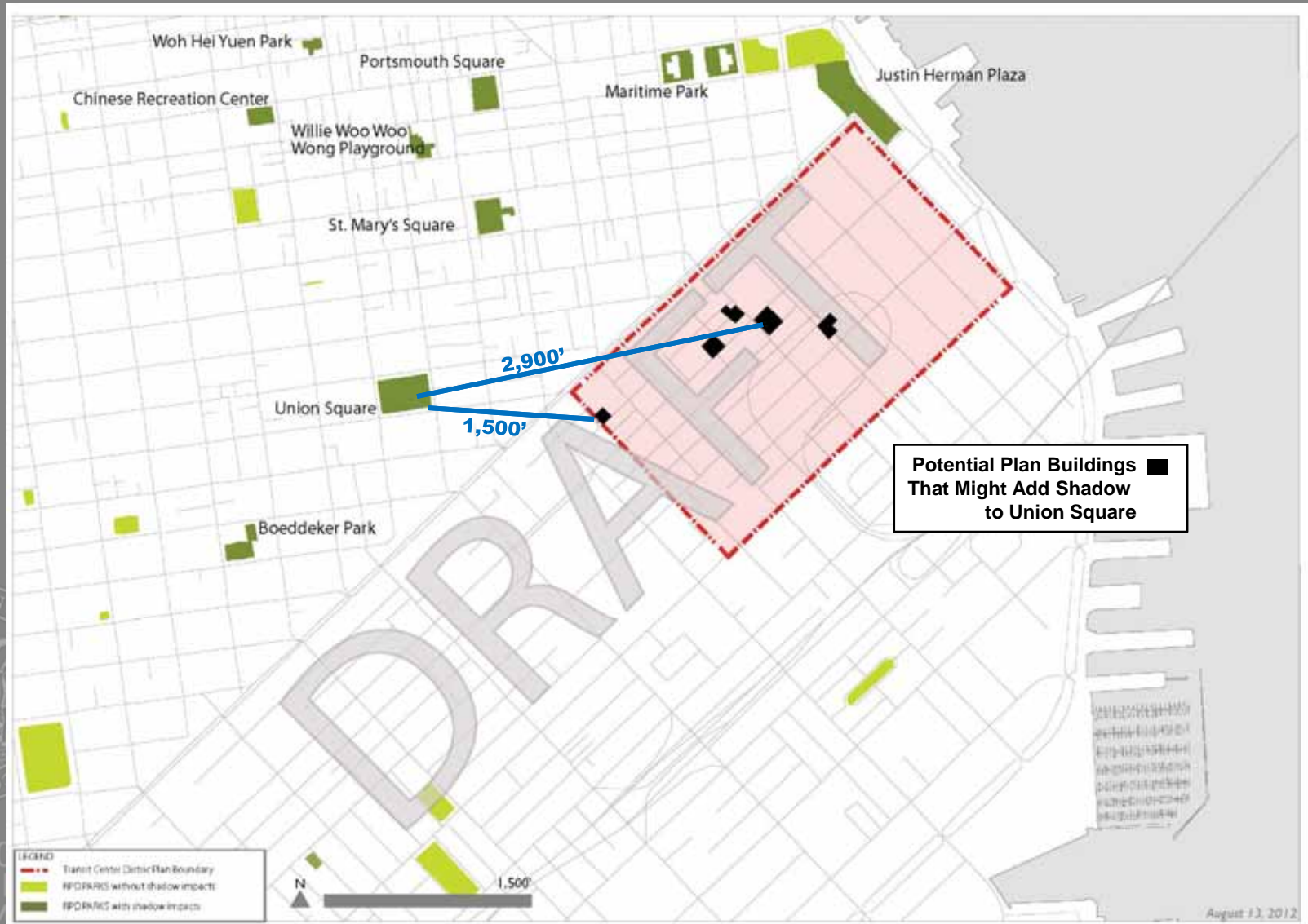
Proposed ACL:

0.090% (+0.083%)

Transbay Tower:

0.046%

Union Square



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Union Square

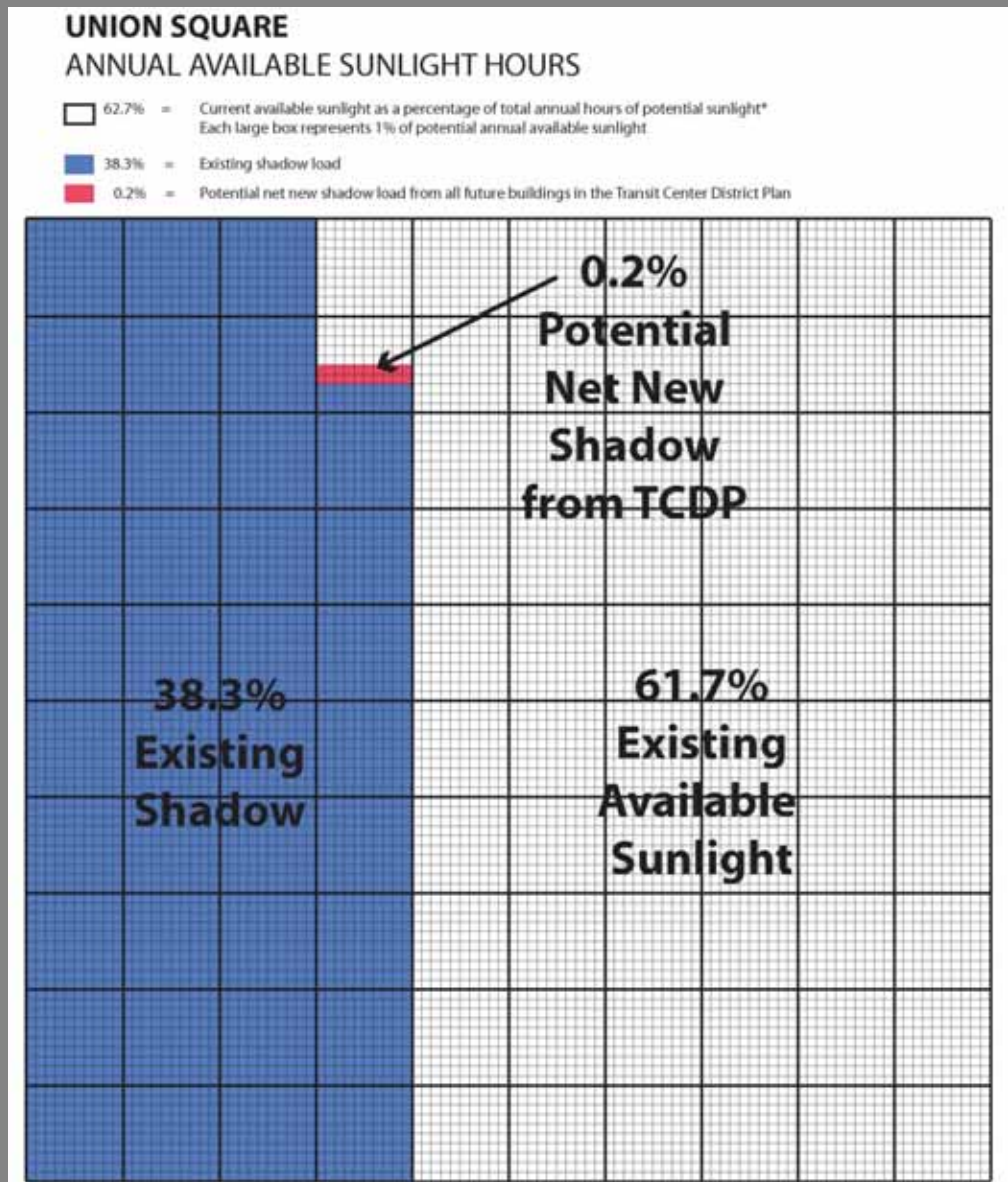
Time of Year:
Mid-March through late
September

Duration:
5-60 minutes

Time of Day:
Between 7:10-8:40am



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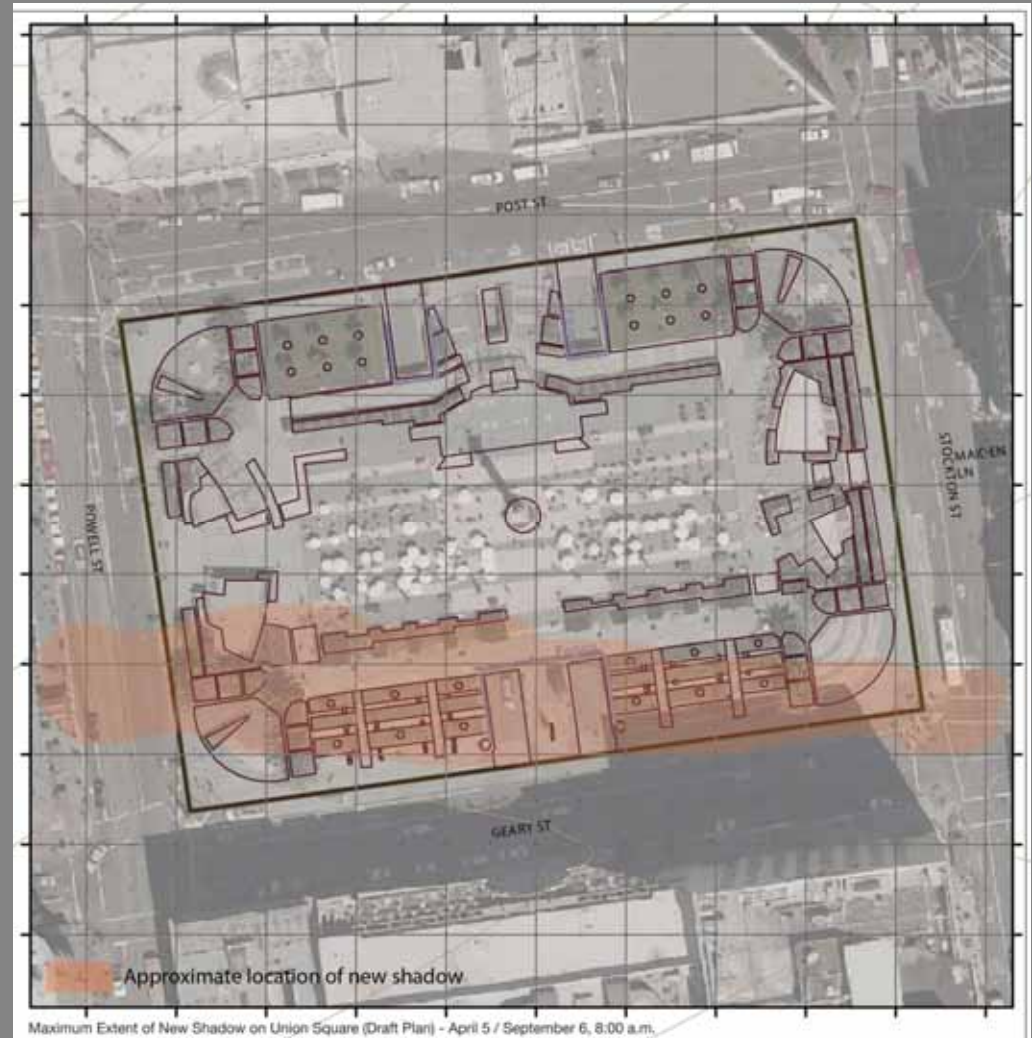


Union Square

Time of Year:
Mid-March through late
September

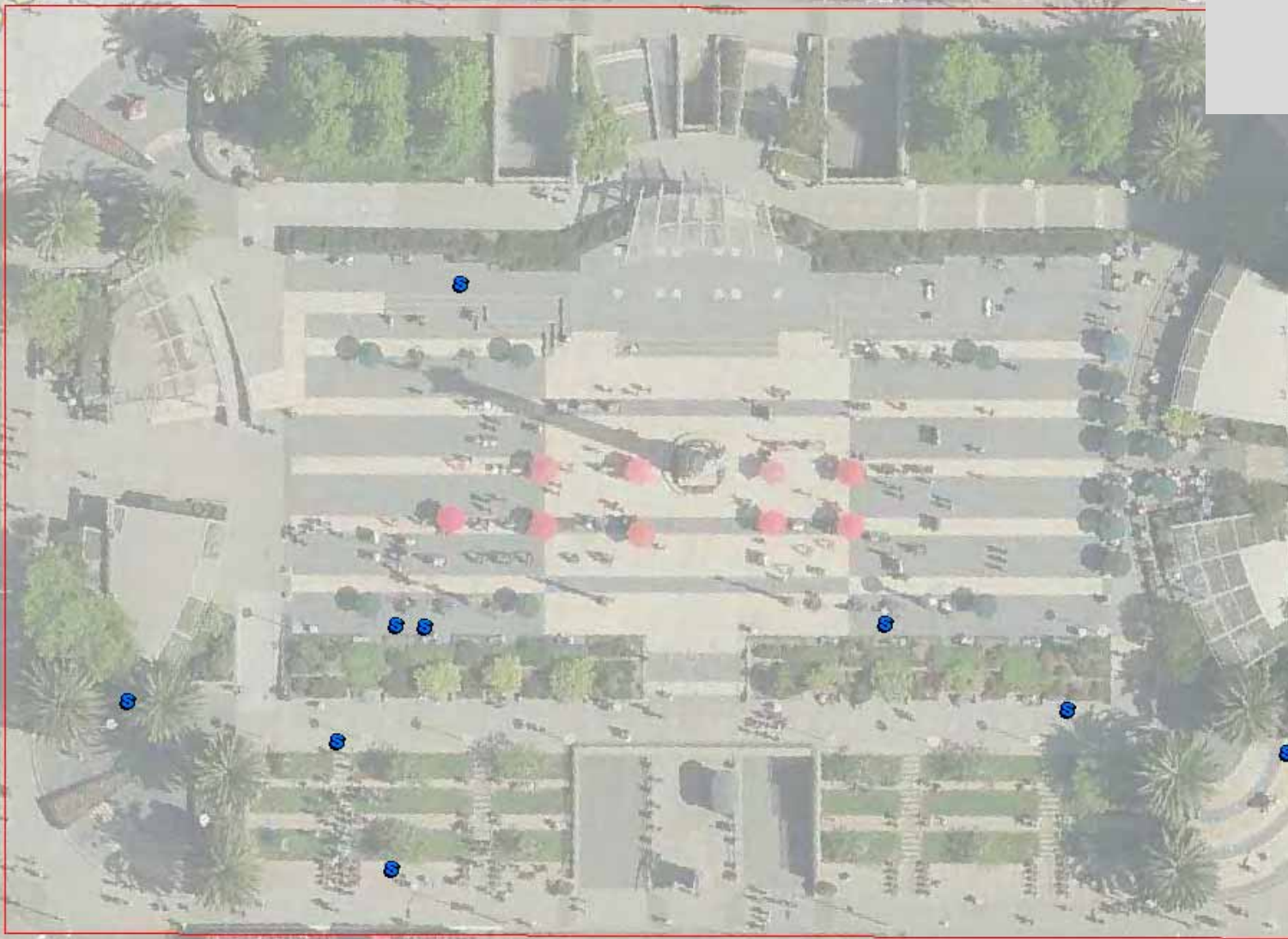
Duration:
5-60 minutes

Time of Day:
Between 7:10-8:40am



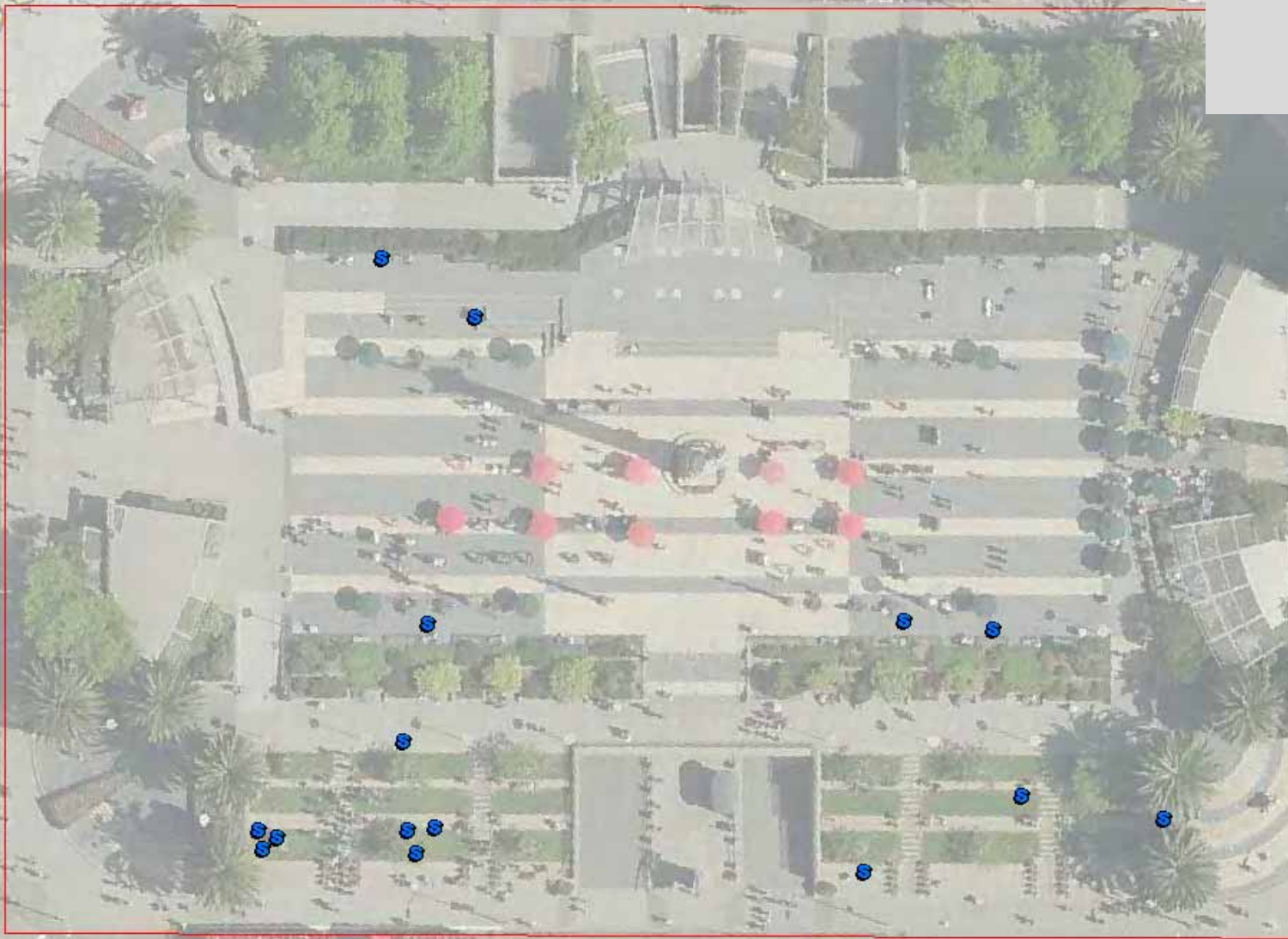
Maximum Extent of New Shadow on Union Square (Draft Plan) - April 5 / September 6, 8:00 a.m.

Union Square
08/24/2012
07:00 AM
Fog



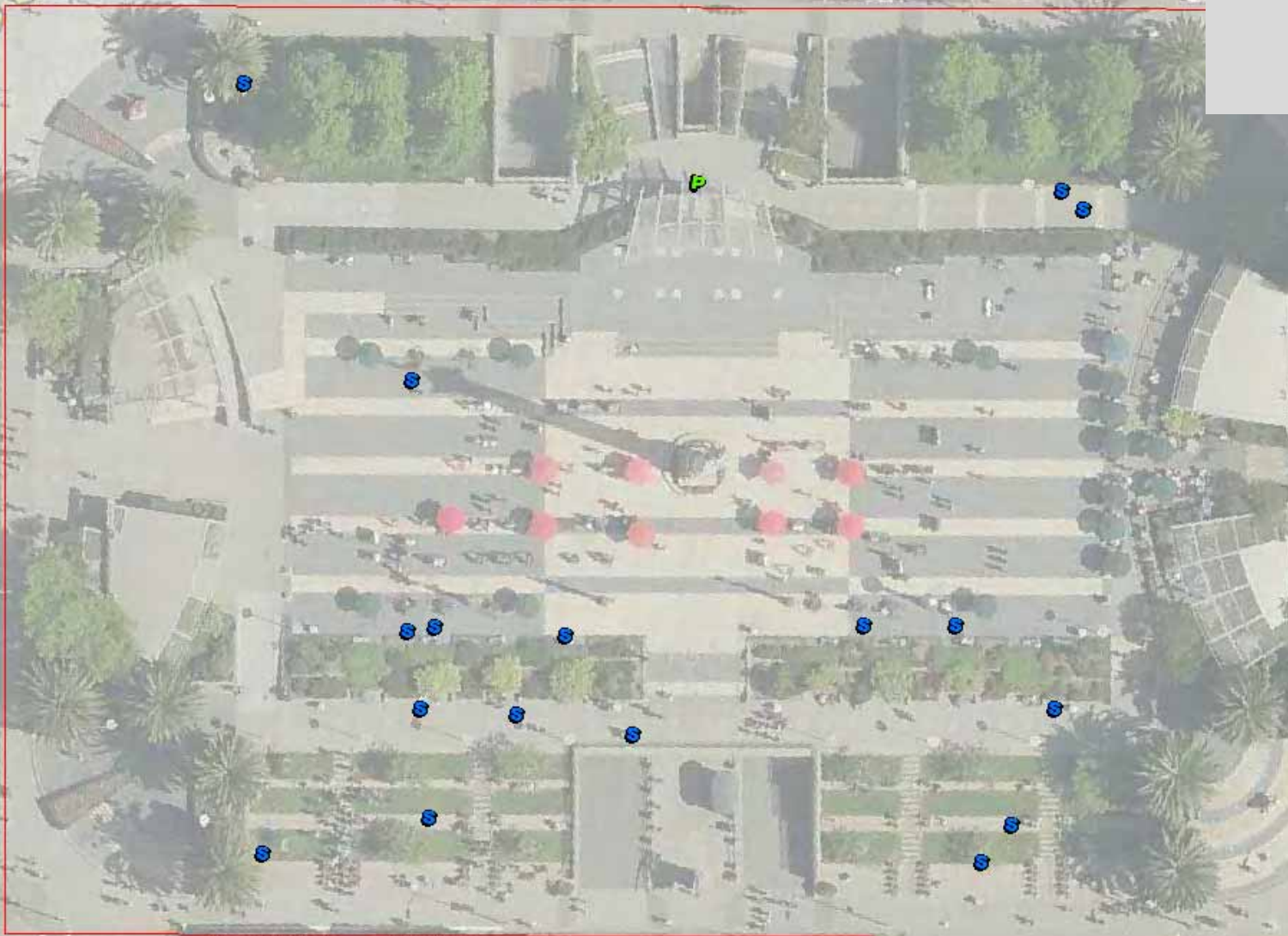
Exercise
Play
Sedentary
Photos

Union Square
08/24/2012
07:30 AM
Fog



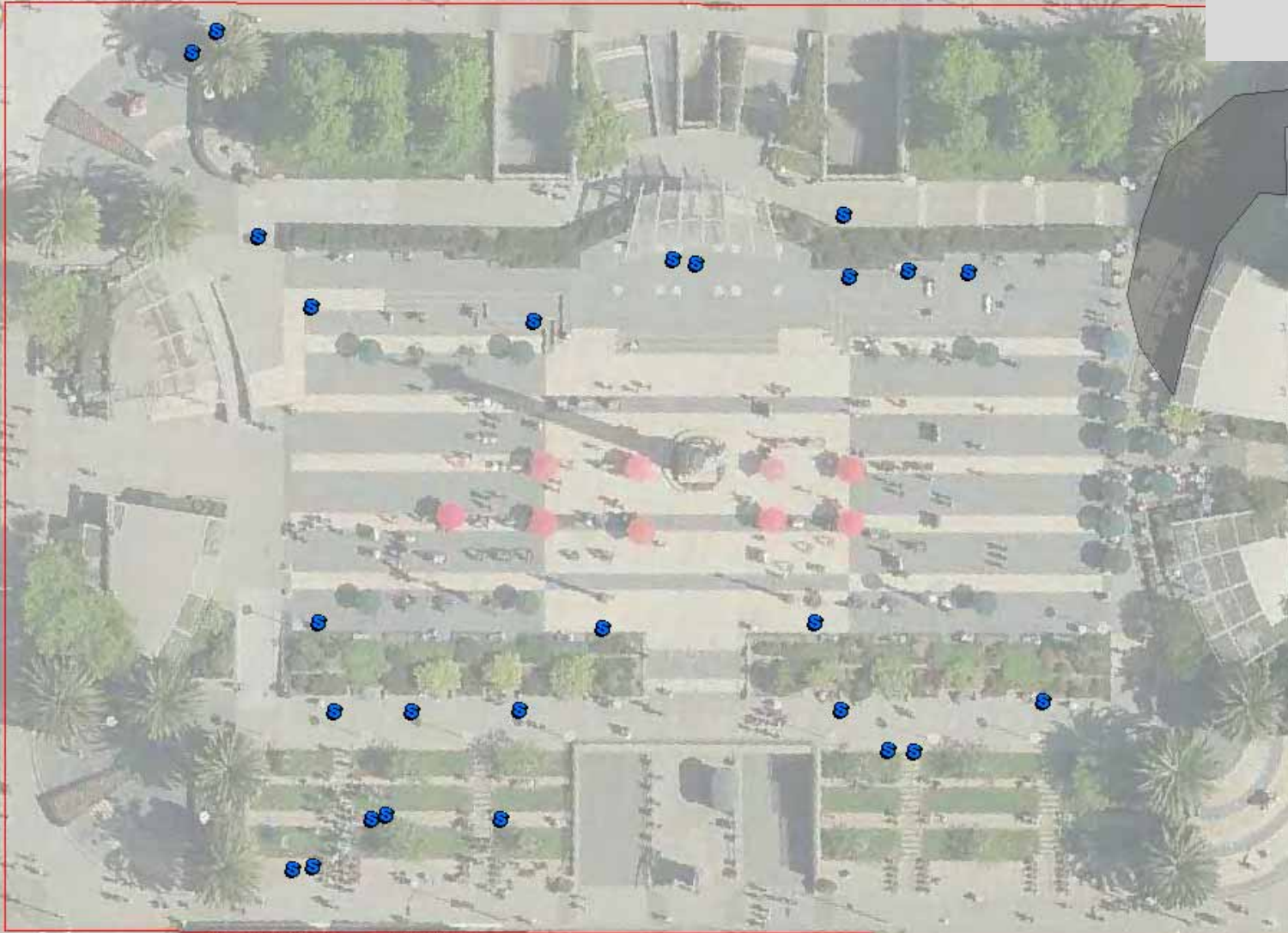
Exercise
Play
Sedentary
Photos

Union Square
08/24/2012
08:00 AM
Fog



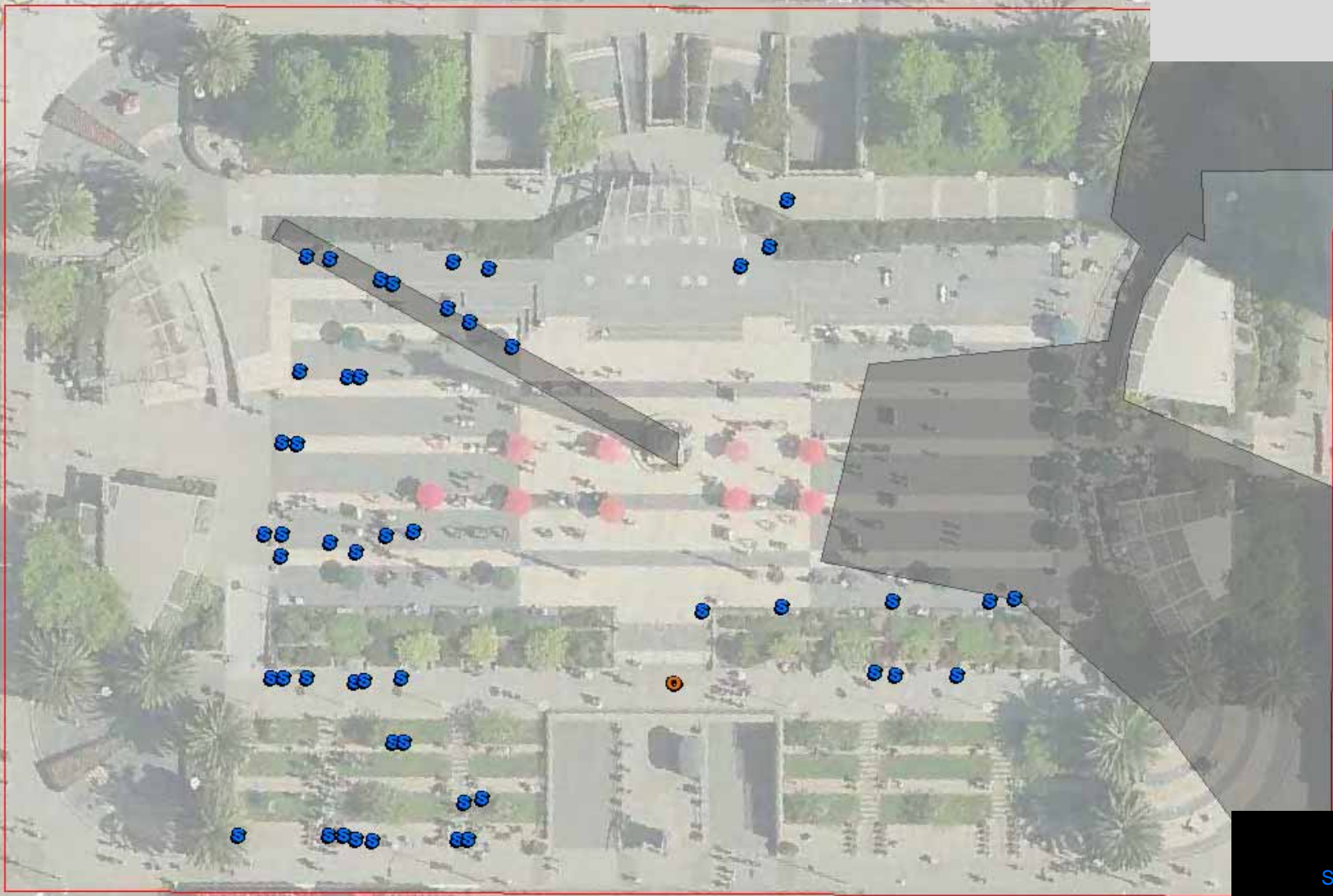
Exercise
Play
Sedentary
Photos

Union Square
08/24/2012
08:30 AM



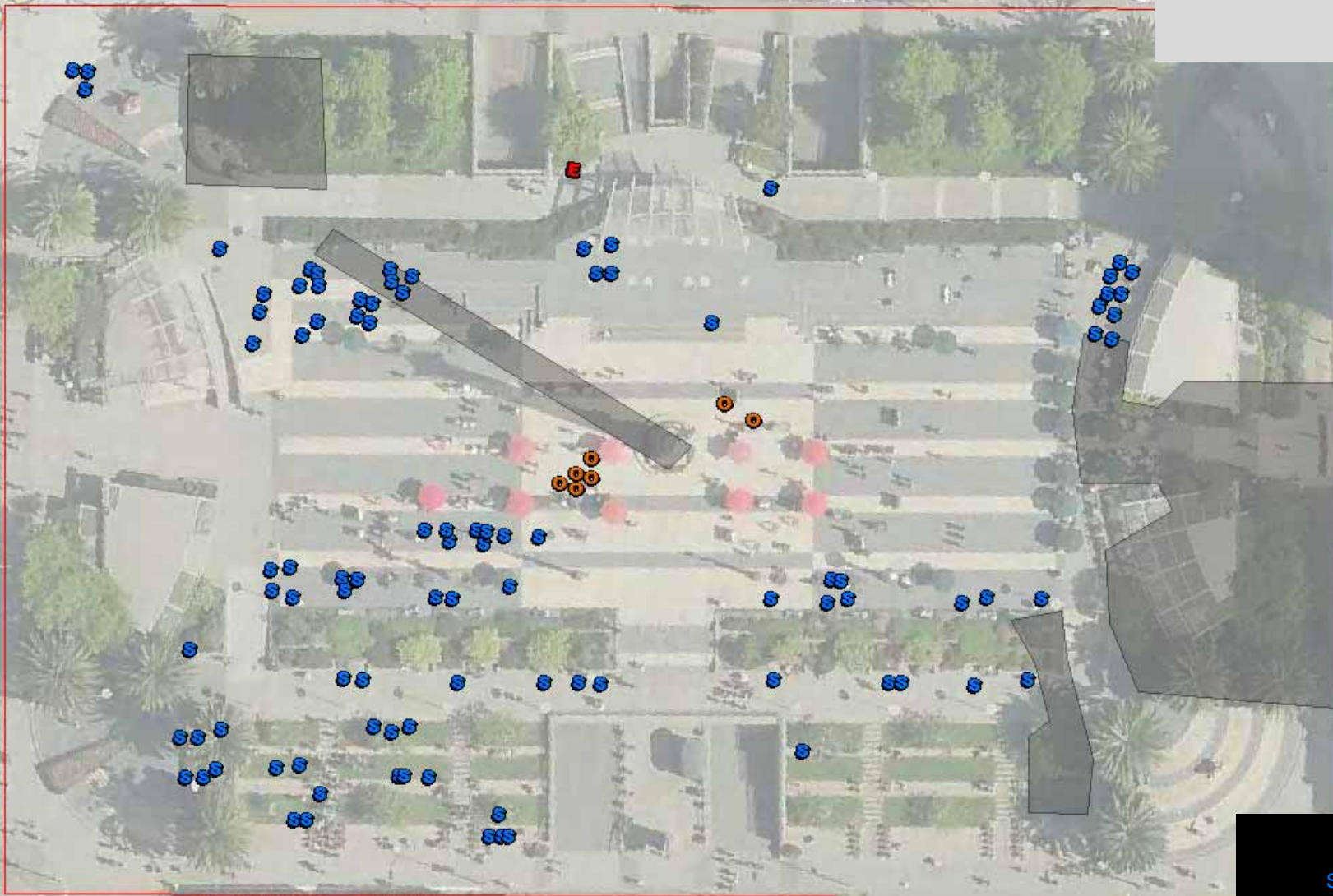
Exercise
Play
Sedentary
Photos

Union Square
08/24/2012
09:00 AM



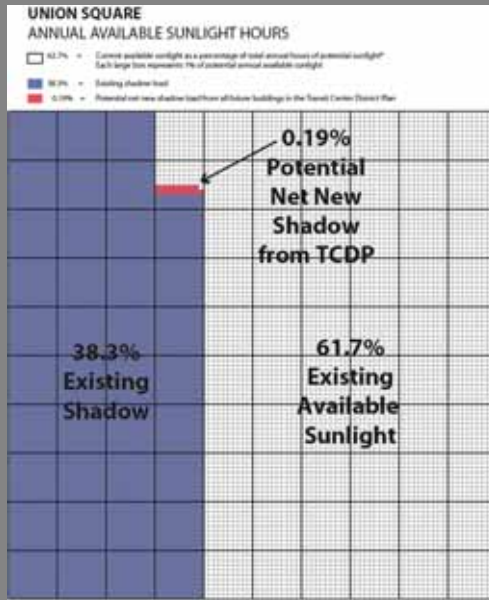
Exercise
Play
Sedentary
Photos

Union Square
08/24/2012
09:30 AM



Exercise
Play
Sedentary
Photos

Union Square: Findings



- Union Square very lightly used prior to 9:00am; mostly pass-through traffic
- Predominant use in newly shaded area is waiting for tour buses

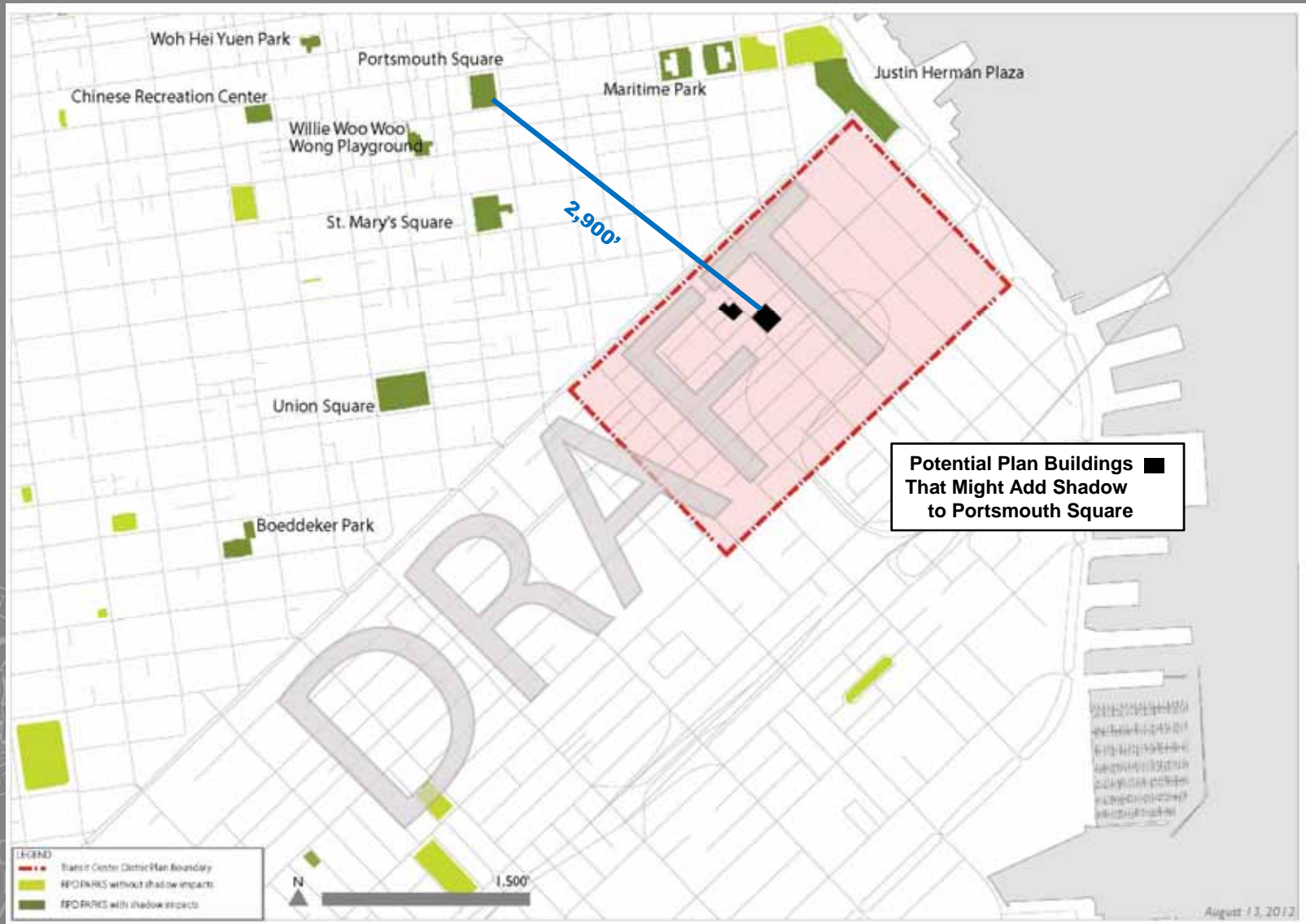


Current Available ACL:
0.080%

Proposed ACL:
0.190% (+0.110%)

Transbay Tower:
0.011%

Portsmouth Square



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Portsmouth Square

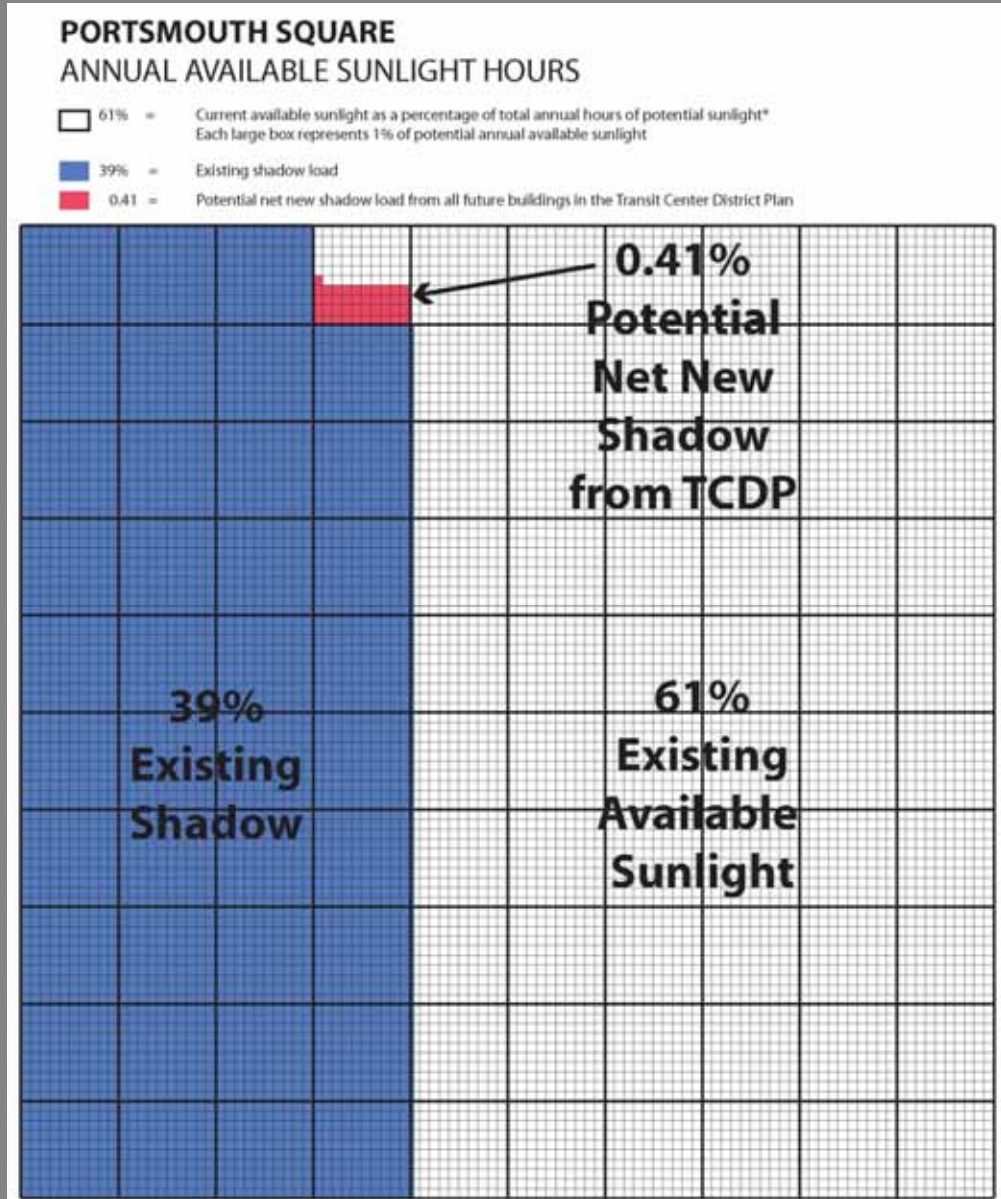
Time of Year:
Mid-October to
Mid-February

Duration:
30 - 60 minutes

Time of Day:
Between 8:00-9:10am



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Portsmouth Square

Time of Year:
Mid-October to early
December and
early January to late February

Duration:
30 - 60 minutes

Time of Day:
Between 8:00-9:10am



Portsmouth Square
08:30 AM



Exercise
Play
Sedentary

Portsmouth Square
09:00 AM



Exercise
Play
Sedentary

Portsmouth Square
09:30 AM



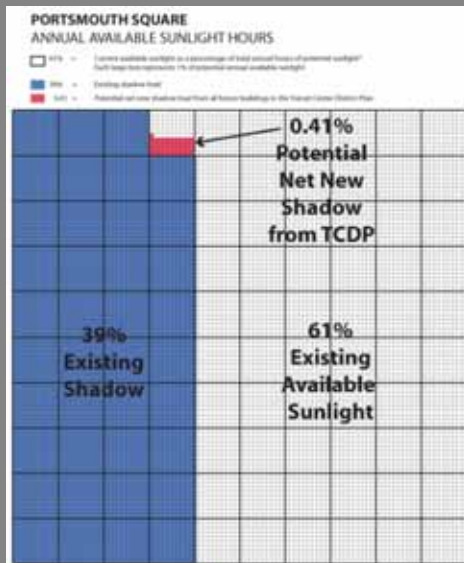
Exercise
Play
Sedentary

Portsmouth Square
10:00 AM



Exercise
Play
Sedentary

Portsmouth Square: Findings



- Steady usage starting in early morning, increasing substantially after 9:00am
- Usage spread evenly throughout park
- Many shaded areas heavily used
- Morning exercise (tai chi) concentrated in primary open area in upper plaza where groups can assemble

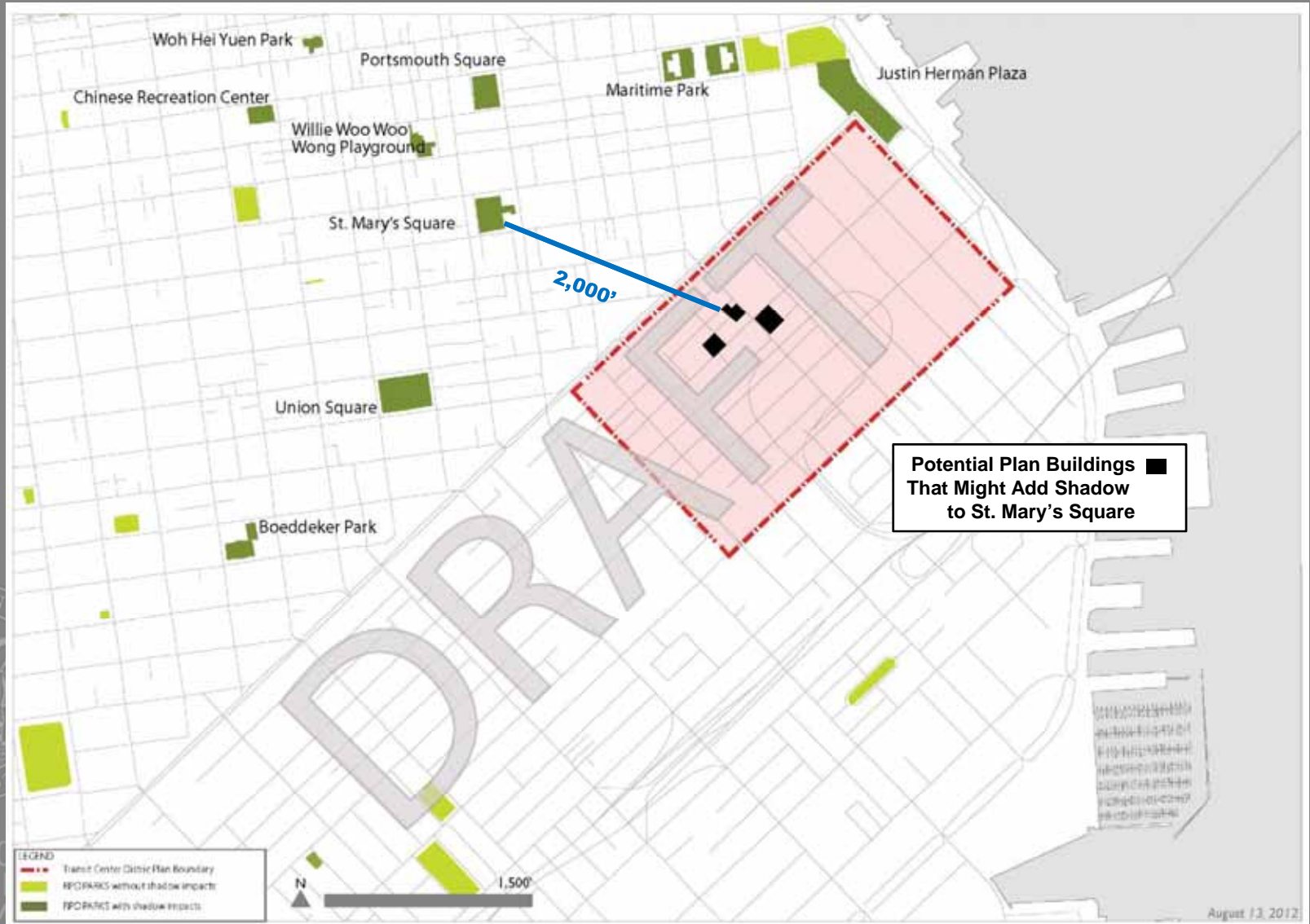


Current Available ACL:
0.0%

Proposed ACL:
0.410% (+0.410%)

Transbay Tower:
0.133%

St. Mary's Square



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St. Mary's Square

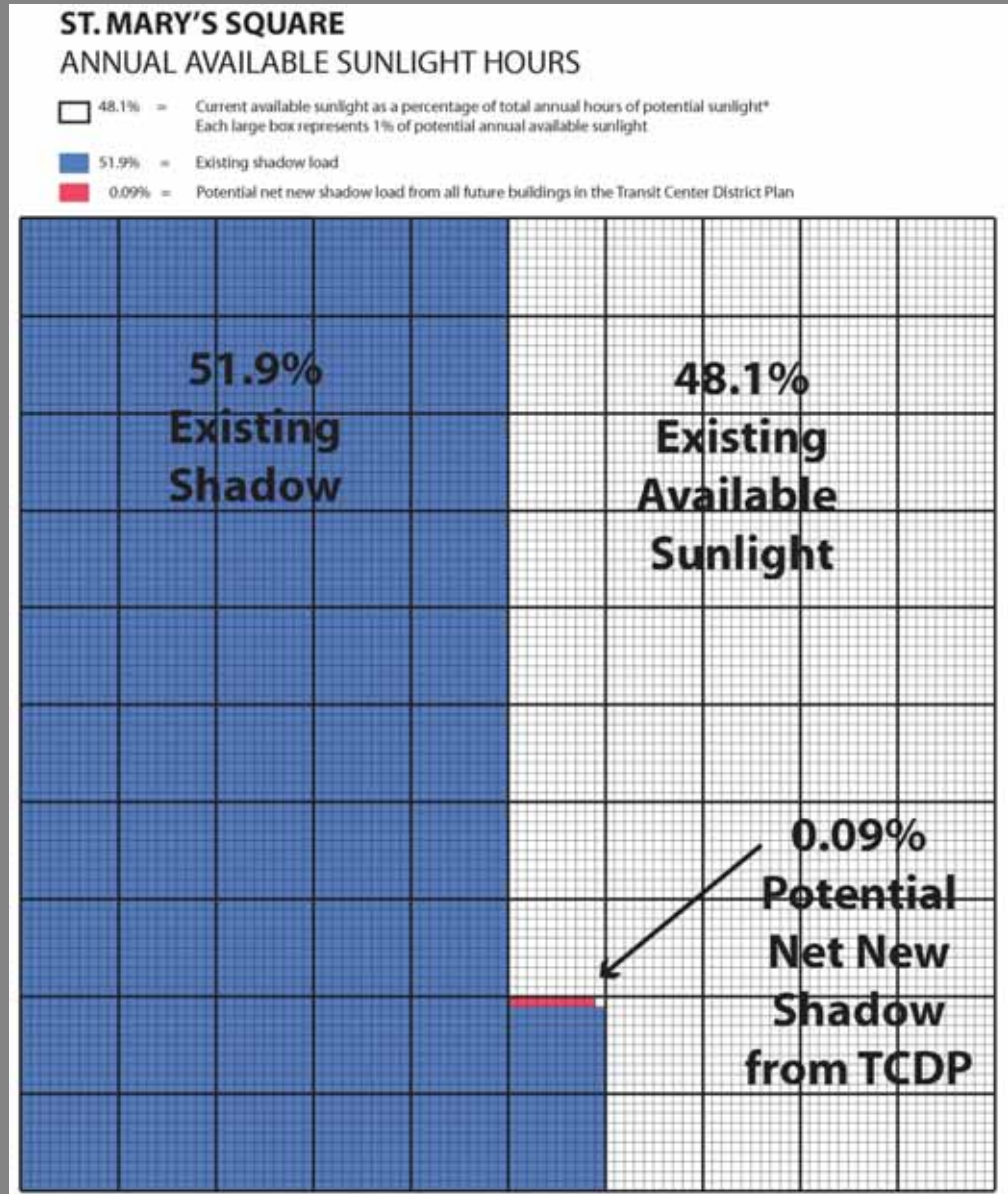
Time of Year:
Mid-September to mid-October and
Late February to late March

Duration:
20 - 30 minutes

Time of Day:
Between 8:10-9:10am



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St. Mary's Square

Time of Year:
Mid-September to mid-
October and
Late February to late March

Duration:
20 - 30 minutes

Time of Day:
Between 8:10-9:10am

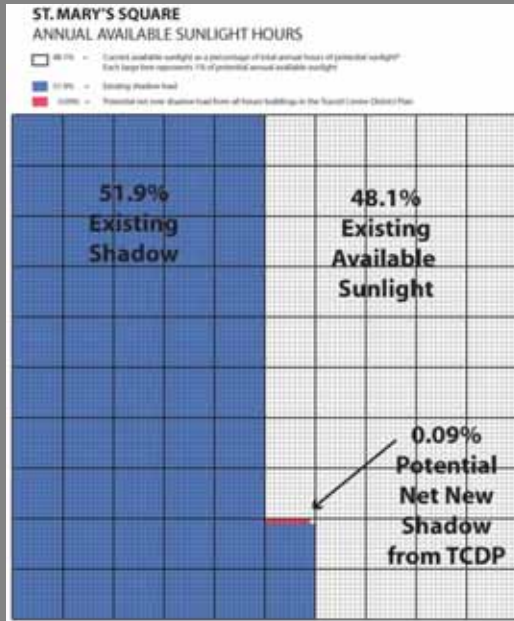


Maximum Extent of New Shadow on St. Mary's Square - March 16 / September 27, 8:45 a.m.

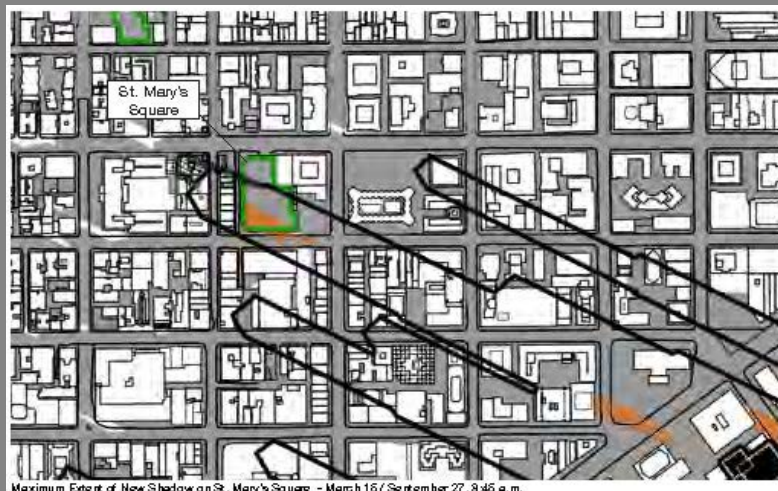


Maximum Extent of New Shadow on St. Mary's Square - March 15 / September 27, 8:45 a.m.

St. Mary's Square: Findings



- St. Mary's Sq. lightly though steadily used
- Usage spread evenly throughout park, including in shaded areas
- Exercise (tai chi) occurs in open areas regardless of shading



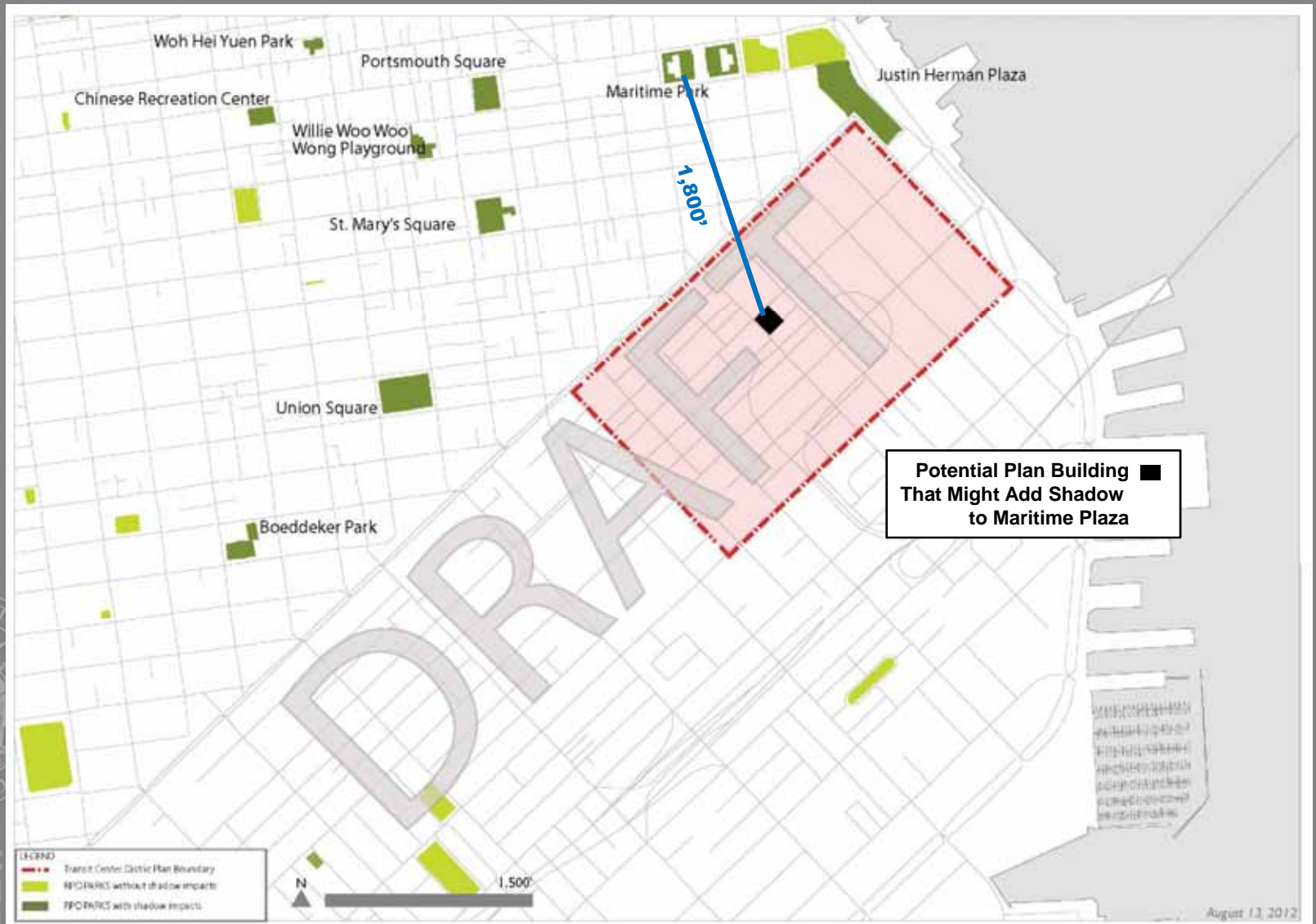
Current Available ACL:

0.0%

Proposed ACL:
0.090% (+0.090%)

Transbay Tower:
0.048%

Maritime Plaza



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Maritime Plaza

Time of Year:
Early to Mid December,
Late December to Early January

Duration:
25 minutes

Time of Day:
10:40 - 11:05am



Maritime Plaza: Findings



- Plaza used very lightly, mostly lunchtime – difficult access, lack of amenities, proximity to waterfront
- Shadow very limited duration before lunch
- New shadow primarily by lattice top of Transbay Tower; likely diffuse if apparent at all on the ground



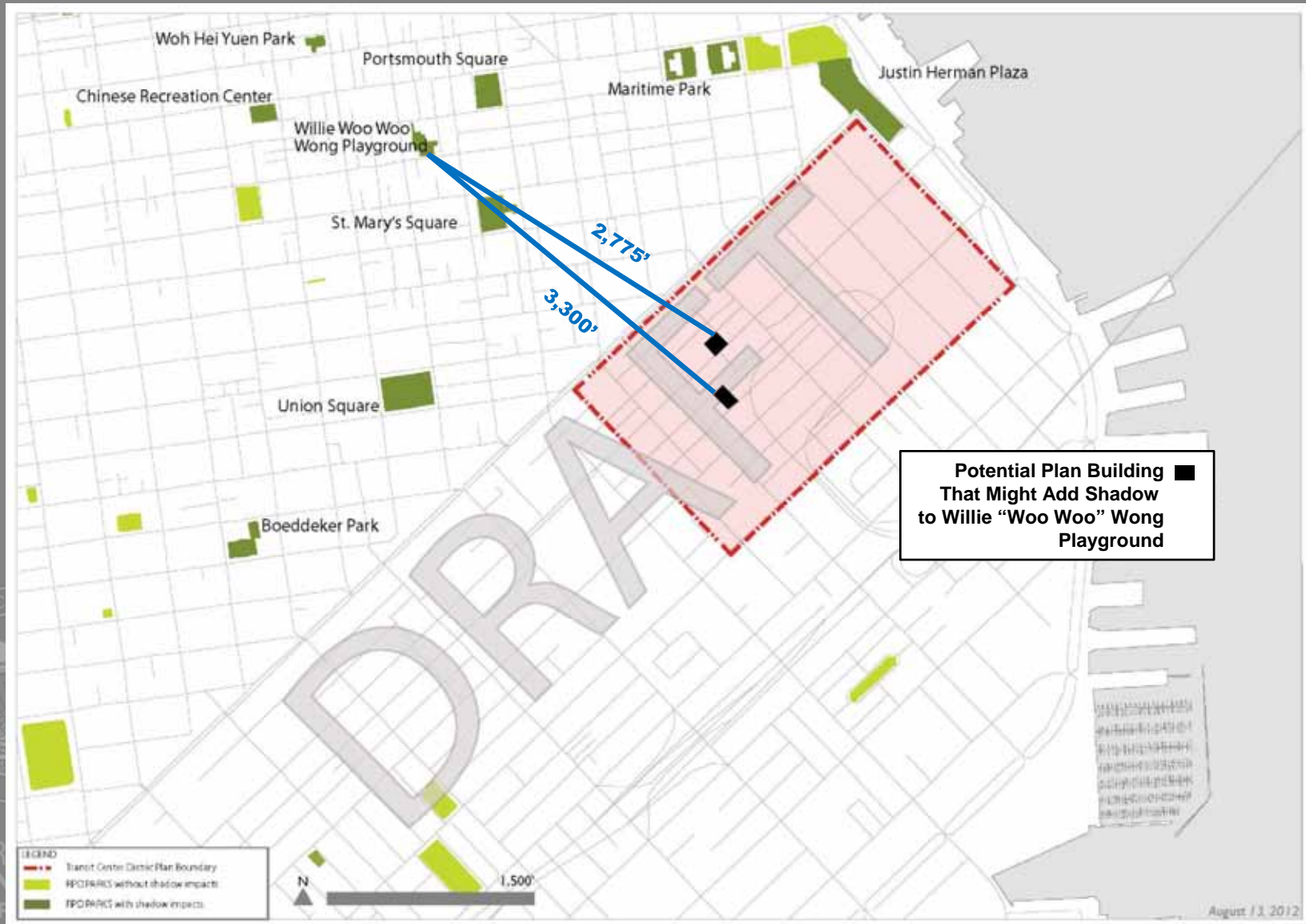
Current Available ACL:

0.0%

Proposed ACL:
0.004% (+0.004%)

Transbay Tower:
0.004%

Willie "Woo Woo" Wong Playground



Willie “Woo Woo” Wong Playground

Time of Year:
Early November – Early
December;
January

Duration:
20 minutes

Time of Day:
8:00 – 8:25am



Willie Wong Playground: Findings



- Shadow very limited duration in early morning in late fall and early winter
- Usage of sport courts and playground unlikely to have significant usage at time of day and year when new shadow would occur (e.g. children in school)



Current Available ACL:

0.0%

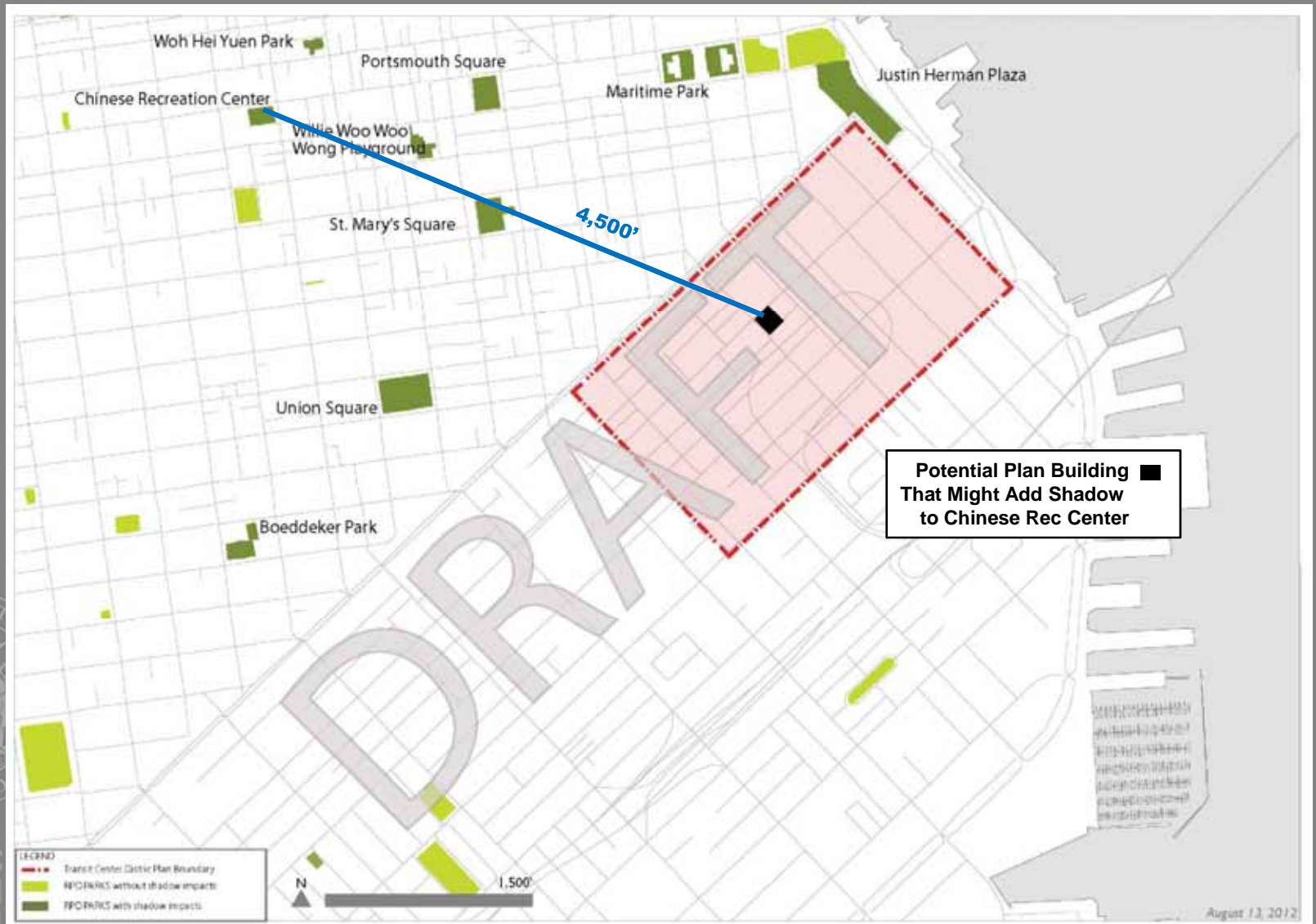
Proposed ACL:

0.03% (+0.03%)

Transbay Tower:

N/A

Chinese Recreation Center



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Chinese Recreation Center

Time of Year:
Mid October; Mid February

Duration:
5 minutes

Time of Day:
8:25am



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Chinese Rec Center: Findings



- Shadow very limited duration in early morning at first minute of analysis, departing immediately
- Shadow would fall mostly on Rec Center roof
- Rec Center just built and opened in 2012



Current Available ACL:

N/A

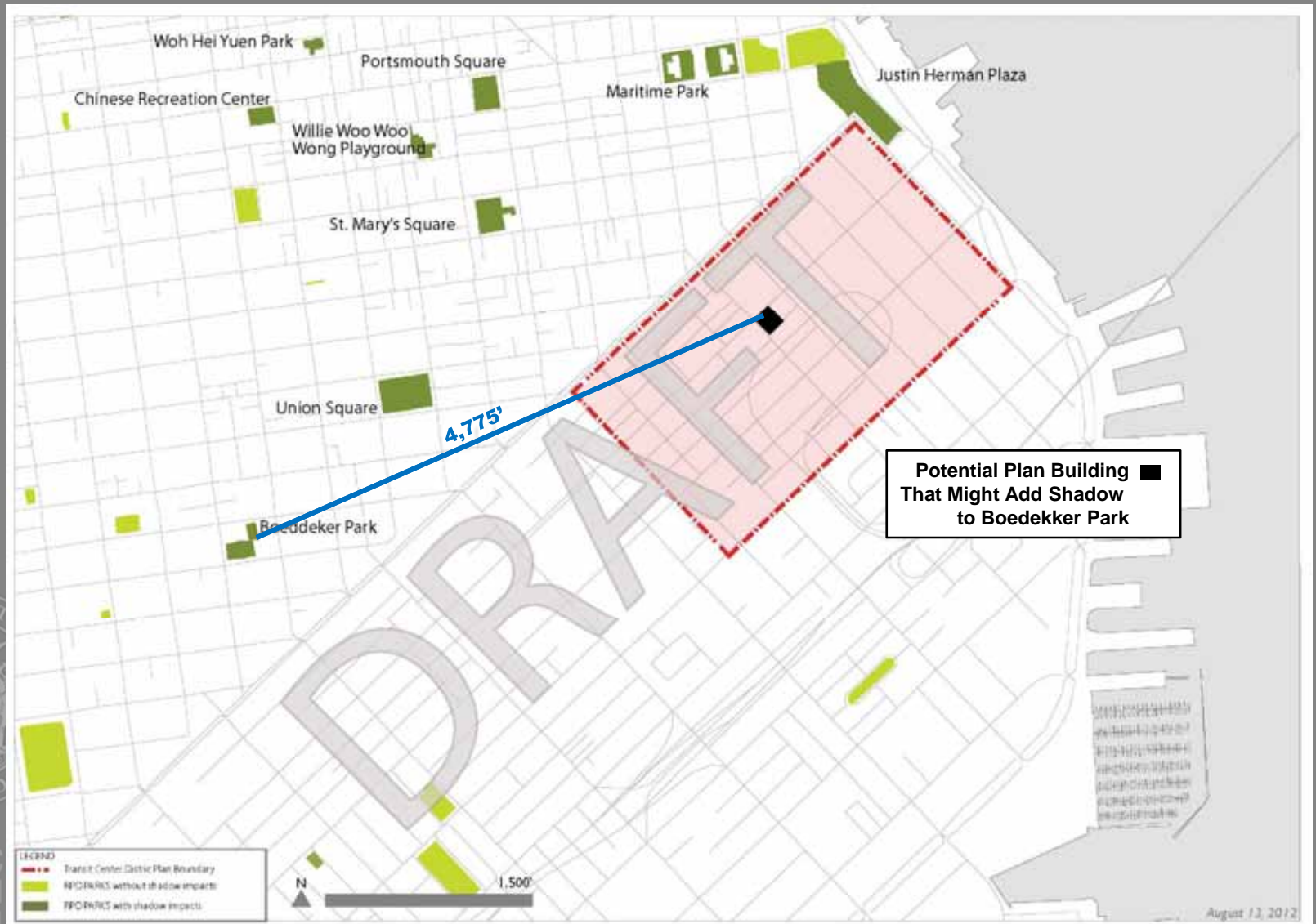
Proposed ACL:

N/A

Transbay Tower:

0.008%

Boedekker Park



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Boedekker Park

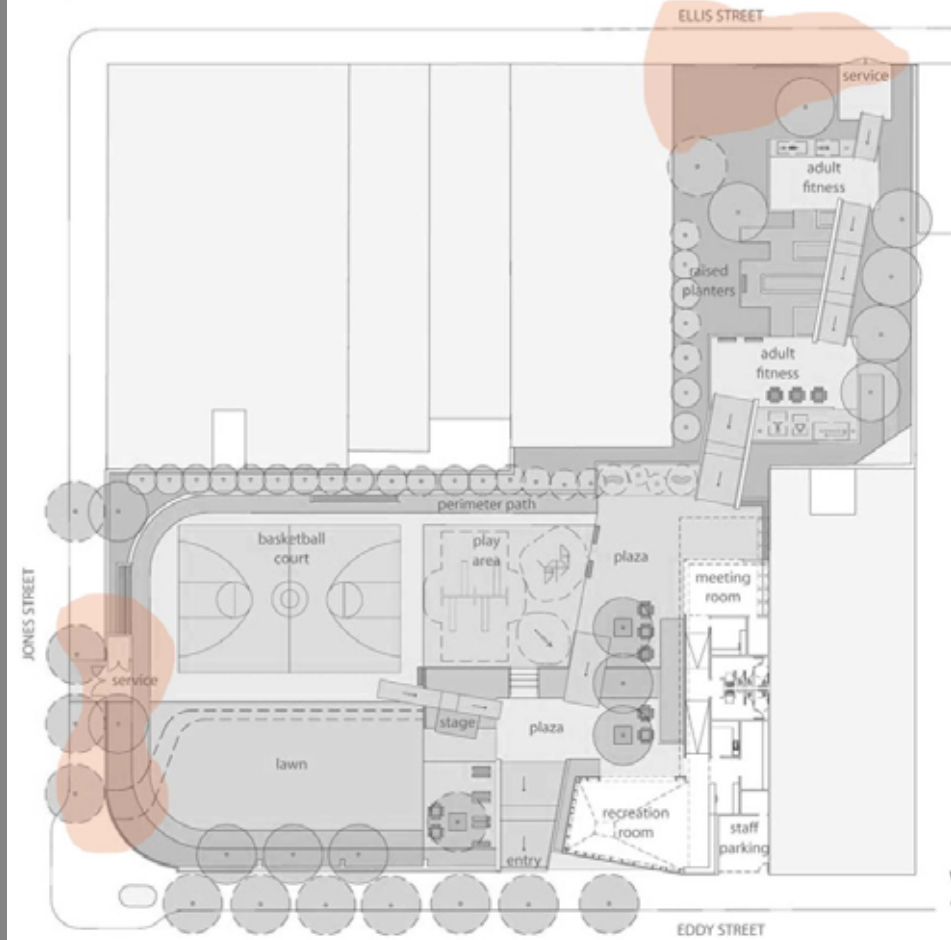
Time of Year:
Early June – Early July

Duration:
5 minutes

Time of Day:
6:47 – 7:00am



Proposed Site Plan



Approximate location of new shadow

Maximum Extent of New Shadow on Boeddeker Park- June 21 / September 21, 6:47 a.m. (First Prop. K minute)

Boedekker Park: Findings



- Shadow very limited duration in early morning at first minute of analysis, departing immediately
- Shadow would fall where public use not expected based on proposed re-design -- fenced street edges, raised planters, service gates
- Park not historically open during early morning hours

Current Available ACL:

0.0%

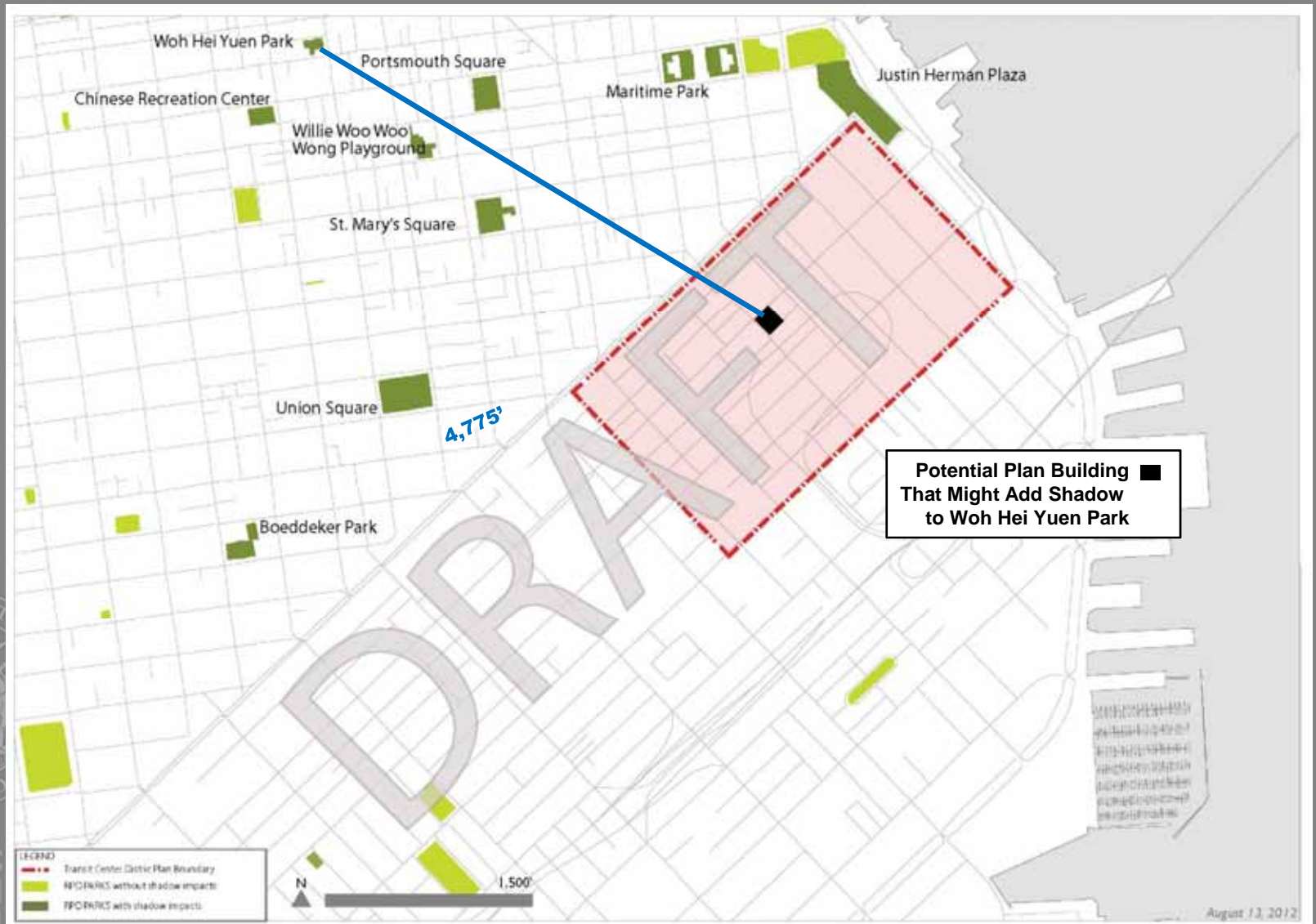
Proposed ACL:

0.003% (+0.003%)

Transbay Tower:

0.003%

Woh Hei Yuen Park



Woh Hei Yuen Park

Time of Year:
Early November;
Early February

Duration:
<10 minutes

Time of Day:
7:44 – 7:50am



Woh Hei Yuen Park: Findings



- Shadow very limited duration in early morning at first minute of analysis, departing immediately
- Shadow would occur at edges and not in open areas where morning exercise is conducted



Current Available ACL:

N/A

Proposed ACL:

N/A

Transbay Tower:

0.001%

Park Shadow Taskforce

- Established by Mayor Gavin Newsom and Board President David Chiu
- Taskforce held five public meeting Sep 2010 – May 2012
- Closing statement issued jointly by Taskforce chairs:

“The Task Force proposes that the Planning Commission and the Recreation and Parks Commission review cumulative data regarding shadow impacts from development within the Transit Center District Plan, and consider whether to allocate shadow budgets cumulatively for all development within the Plan area versus allocating shadow budgets on a project-by-project basis. Informational presentations of any potential shadowing of property under the jurisdiction of the Recreation and Parks Department by each individual project would also be made to both Commissions as projects seek entitlements.”



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Section 295 Process: TCDP

Consideration of the budgets and the allocation to individual buildings are separate actions.

Joint Hearing
(Oct. 11, 2012)

Revise the 1989 Memo to raise budgets on certain parks and adopt qualitative criteria

RPD Commission and GM recommendation to Planning Commission on individual projects
(Transbay Tower – Oct 11, 2012;
Others TBD)

Determination that new shadows from individual projects are not adverse and meet quantitative and qualitative criteria



Planning Commission action on individual projects
(Transbay Tower – Oct 18, 2012;
Others TBD)

Determination that new shadows from individual projects are not adverse and meet quantitative and qualitative criteria; "Allocate" available ACL to projects as part of project entitlements

Section 295 Process: TCDP

Amend 1989 Memo to:

(1) Revise the Absolute Cumulative Limits for 7 parks reflective of the analysis in the Plan FEIR

Open Space	Current Available ACL	Cumulative Plan Shadow	Proposed ACL Increase	Total ACL after Proposed Increase	Transbay Tower Shadow	Remaining ACL After Transbay Tower Allocation
Union Square	0.080%	0.190%	0.110%	0.190%	0.011%	0.179%
St. Mary's Square	0%	0.090%	0.090%	0.090%	0.048%	0.042%
Portsmouth Square	0%	0.410%	0.410%	0.410%	0.133%	0.277%
Justin Herman Plaza	0.007%	0.090%	0.083%	0.090%	0.046%	0.044%
Willie "Woo Woo" Wong Playgrou	0%	0.030%	0.030%	0.030%	N/A	0.030%
Maritime Plaza	0%	0.004%	0.004%	0.004%	0.004%	0%
Woh Hei Yuen Park	N/A	0.001%	N/A	N/A	0.001%	N/A
Chinese Recreation Center	N/A	0.008%	N/A	N/A	0.008%	N/A
Boedekker Park	0%	0.003%	0.003%	0.003%	0.003%	0%



Section 295 Process: TCDP

Revise 1989 Memo to:

- (1) Revise the Absolute Cumulative Limits for 7 parks reflective of the analysis in the Plan FEIR
- (2) Adopt further Criteria for Allocation of shadow for these parks:
 - Only buildings whose shadow profiles are consistent with the analysis in the FEIR may be considered for allocation (i.e. location and extent of shadows, duration, time of day, time of year)
 - Individual projects must demonstrate that efforts have been made to refine building designs to reduce shadow impacts below that analyzed in the Plan FEIR
 - “Public good” of individual projects in TCDP shall be considered in the context of public benefits of the TCDP as a whole



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Thank You

Questions?



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