



SAN FRANCISCO PLANNING DEPARTMENT

Informational Hearing on Section 295 Actions Related to the Transit Center District Plan and Transbay Tower (101 1st Street)

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Executive Summary HEARING DATE: SEPTEMBER 27, 2012

Case Nos.: **2007.0558K**
 Section 295 Action Pursuant to the Transit Center District Plan
 2008.0789K
 Section 295 Actions Related to 101 1st Street (Transbay Tower)

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ATTACHMENTS: Individual Park Shadow and Usage Analysis
 Text of Planning Code Section 295
 1989 Proposition K Implementation Memo
 Park Shadow Task Force Closing Statement (May 24, 2012)

SUMMARY

On August 8, 2012, Mayor Edwin M. Lee signed the ordinances adopting and implementing the Transit Center District Plan (“TCDP” or “the Plan”) following approval by the Board of Supervisors in July by a vote of 10-0. The result of a multi-year public and cooperative interagency planning process that began in 2007, the Plan is a comprehensive vision for shaping growth on the southern side of Downtown to respond to and support the construction of the new Transbay Transit Center project, including the Downtown Rail Extension. Implementation of the Plan would result in generation of up to \$590 million for public infrastructure, including over \$400 million for the Downtown Rail Extension. Adoption of the Plan included height reclassification of numerous parcels in the area to increase height limits, including a landmark tower site in front of the Transit Center with a height limit of 1,000 feet and several other nearby

sites with height limits ranging from 600 to 850 feet. The Plan FEIR identified potential new shadows on up to nine open spaces under the jurisdiction of the Recreation & Parks Department ("RPD") that could be created cumulatively by likely development sites in the Plan area. Approval of buildings on some of these sites would thus be subject to approval under the procedures of Planning Code Section 295 (also known as "Prop K") by the Recreation & Parks and Planning Commissions.

In 1989 the Planning and Recreation & Parks Commission jointly adopted a memo implementing Section 295, per Prop K, that established both qualitative criteria for evaluating shadow impacts and well as Absolute Cumulative Limits ("ACLs" or "budgets") for new shadows on certain parks in the downtown area. Since 1989, budgets on some of these individual parks have been increased nine times in response to individual projects that would add shadows to these parks. In order to implement the Plan, the Planning Department recommends revising the 1989 Memo to comprehensively revise the ACLs for eight downtown parks based on the cumulative potential shading by future buildings anticipated in the Plan's zoning framework and as analyzed in the Plan's certified EIR. Amending the 1989 Memo to revise the ACLs requires a joint action by the Planning and Recreation & Parks Commissions. In amending the Memo and revising the ACLs pursuant to the Plan, the Department recommends that the Commissions adopt criteria that restricts allocation of newly available ACL for these parks only to buildings in the Plan area consistent with the certified EIR.

The Transbay Tower (101 1st Street; Case 2012.0257) is a proposed 1,070'-tall 1.35 million square foot office building adjacent to the Transbay Transit Center at the southeast corner of Mission and 1st Streets. This tower is intended to become the centerpiece of the downtown skyline and mark the front door of the Transit Center. The Transbay Tower is on land currently owned by the Transbay Joint Power Authority ("TJPA"), which would sell the property to the project sponsor (Hines Corporation). The Transbay Tower would cast new shadow on eight parks, seven of which have ACLs. In order for the Planning Commission to approve the Transbay Tower project, Section 295 requires that the General Manager of the Recreation & Park Department (RPD), in consultation with the Recreation and Park Commission determine that any significant new shadows cast by the project would not be adverse to the use of those parks. The findings of the General Manager are based on the qualitative criteria established in the 1989 Memo. (For the parks with ACLs, availability of ACL is a pre-condition to considering such a determination.) The act of the RPD General Manager making such a determination for a project that would add shadow to a park with available ACL is colloquially referred to as "allocating" ACL to that development project (and reducing the available ACL accordingly).

The Planning Commission would consider the approval of the Transbay Tower project at a subsequent hearing, scheduled for October 18, 2012.

PRELIMINARY STAFF RECOMMENDATIONS

No Action -- Informational Only.

Preliminary Recommendations for the October 11, 2012 joint hearing of the Planning and Recreation & Parks Commission:

(1) Amend the 1989 Memo to:

- (a) Increase Absolute Cumulative Limits for eight specified parks* based on the analysis for the cumulative development in the Transit Center District Plan Environmental Impact Report certified by the Planning Commission on May 24, 2012. (*Portsmouth Square, St. Mary's Square, Union Square, Justin Herman Plaza, Maritime Plaza, Boeddeker Park, Chinese Recreation Center¹, and Willie Woo Woo Wong Playground)
- (b) Adopt criteria for each of these parks to be considered by the Planning Commission and Recreation & Parks Department General Manager in future determinations under Section 295 that:
 - (1) Newly available ACLs may only be allocated to buildings whose shadow profiles are consistent with those analyzed in the Transit Center District Plan's certified EIR; and
 - (2) Projects must demonstrate that reasonable efforts have been made to refine final building designs in order to reduce shadow impacts below those anticipated in the Plan's EIR.

(2) Adopt findings that the net new shadow from the Transbay Tower (101 1st Street) project are not adverse to the use of eight potentially affected parks (Portsmouth Square, St. Mary's Square, Union Square, Justin Herman Plaza, Maritime Plaza, Boeddeker Park, Woh Hei Yuen Park and Chinese Recreation Center) and that the project meets the above qualitative criteria, and allocate to the project available ACL for the seven affected parks with ACLs² (all those listed above except Woh Hei Yuen Park).

PLAN OVERVIEW

The Transit Center District Plan ("the Plan") supports and builds on the 1985 Downtown Plan's vision for the area around the Transbay Transit Center as the heart of the new downtown. The Planning Commission approved the Plan on May 24, 2012, and the Mayor signed the ordinances on August 8, 2012 adopting and implementing the Plan following approval by the Board of Supervisors in July by a vote of 10-0. An overview of the Plan was provided for the Recreation and Parks Commission at an informational hearing on August 16, 2012.

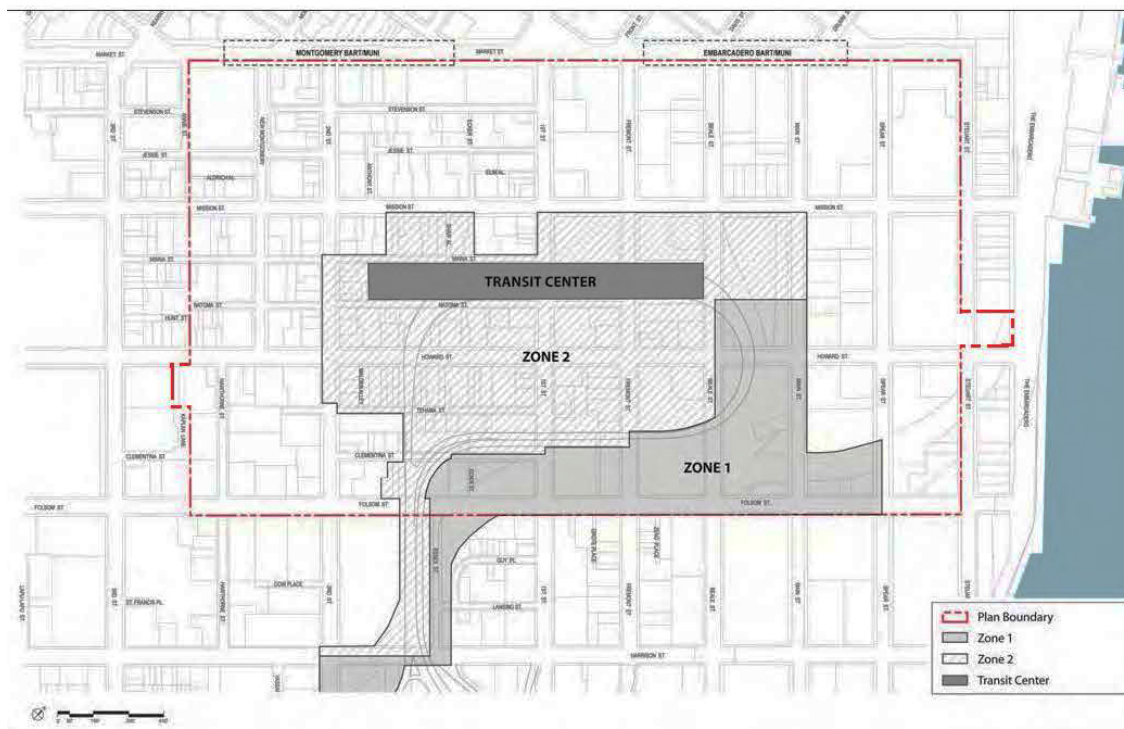
The result of a multi-year public and cooperative interagency planning process that began in 2007, the Plan is a comprehensive vision for shaping growth on the southern side of Downtown to respond to and support the construction of the new Transbay Transit Center project, including

¹ Recent research has indicated that no ACL has ever been adopted for the Chinese Recreation Center. If this is concluded to be the case, no action would be proposed on October 11 regarding revising an ACL for Chinese Recreation Center.

² See Footnote 1.

the Downtown Rail Extension. In addition to laying out policy recommendations to accommodate additional transit-oriented growth, sculpt the downtown skyline, improve streets and open spaces, and expand protection of historic resources, the Plan will result in the potential to generate up to \$590 million for public infrastructure, particularly the Downtown Rail Extension project (“DTX”).

The Plan would create or help fund the creation of over 12 acres of new public open space in the Plan Area, which currently has no publicly-owned open space. While the majority of the fee revenue generated by the Plan is targeted for these open space improvements in the Plan Area, a portion of the projected revenues are allocated to improvements outside of the Plan area, as increased population in the Plan area would have outward rippling effects on usage and demand for open space in nearby neighborhoods. The Funding Program specifically provides for up to \$12.5 million from the Plan’s future Open Space Fee revenue to fund open space improvements outside of the Plan area, including \$9 million for open space improvements in the Chinatown area and \$3.5 million for other downtown area open space improvements. The specific projects to be funded with these monies are to be determined through future deliberations by the Board of Supervisors with input from the Interagency Plan Implementation Committee (“IPIC”), as established in Chapter 36 of the Administrative Code. It is possible that these funds could be spent to acquire, construct or improve new or existing Recreation & Parks Department Open Spaces or open spaces under the jurisdiction of other public agencies. An additional \$6 million will be available from increased revenues into the Downtown Open Space Fund for Recreation & Park Department open space improvements outside of the Plan area.



ENVIRONMENTAL REVIEW

The Planning Commission certified the Final Environmental Impact Report on the Transit Center District Plan and adopted CEQA findings, including Findings of Overriding Consideration, on May 24, 2012. A CEQA appeal was filed and subsequently withdrawn prior to a scheduled Board of Supervisors hearing to consider the appeal. On July 10 the Board upheld the certification of the EIR by a vote of 11-0.

ABSOLUTE CUMULATIVE LIMITS AND THE 1989 JOINT COMMISSION MEMO

Planning Code Section 295, adopted pursuant to Proposition K approved by the City's voters in 1984, requires that the Planning Commission disapprove any building permit to construct a structure exceeding a height of 40 feet that will cast shadow on property under the jurisdiction of the Recreation and Parks Department, unless it is determined that the shadow would not be significant or adverse.

In 1989 the Planning and Recreation & Parks Commission jointly adopted a memo implementing Section 295 that established both qualitative criteria for evaluating shadow impacts and well as Absolute Cumulative Limits ("ACLs" colloquially known as shadow "budgets") for new shadows on certain parks in the downtown area. Amending the 1989 Memo to revise the ACLs requires a joint action by the Planning and Recreation & Parks Commissions. In amending the Memo and revising the ACLs pursuant to the Plan, the Department recommends that the Commissions adopt criteria that restrict allocation of newly available ACL for these parks only to buildings in the Plan area consistent with the certified EIR.

Section 295 and Prop K³ do not require the establishment of Absolute Cumulative Limits, nor do they mention adoption of any particular quantitative mechanism. Section 295 required the Commissions to jointly develop implementation criteria to ensure that shadows which would be adverse to the use of parks would not be created by new development.⁴ The Planning and Recreation & Parks Commission decided jointly to create such limits for certain parks in the downtown area in order to more deliberately manage the sunlight on parks in the densest part of the City. Fourteen of the approximately 220 properties under the jurisdiction of the Recreation and Parks Department have ACLs. The same overall qualitative criteria of Section 295 apply to all parks. Additional qualitative criteria were adopted in the 1989 Memo for the three downtown

³ The full text of Section 295 is included as an attachment to this report. Note that Proposition K consisted of only the adopted and current text of Section 295.

⁴ See text of Section 295 subsections (b) and (c).

parcs that were at that time granted ACL greater than zero.⁵ Based on the deliberations and analysis leading to the 1989 Memo, the Commissions evaluated the various parks and considered the overall patterns of development in the broader downtown area, and decided to set various standards for certain parks. As the ACLs are a creation of joint Commissions in the 1989 memo, the joint Commissions have the ability to revise such limits as they see fit provided that the revisions are still consistent with Section 295's mandate that no new shadows may be permitted which are adverse to the use of the parks.

The establishment and revision of the ACLs is a distinct action from the consideration of the shadows cast by a particular proposed building. The former is done as a joint action of both Commissions, and the latter as individual actions. Both the Planning and Recreation & Park Commissions, as well as the General Manager of the RPD, review and consider individual developments taller than 40 feet that would cast new shadows on properties under the jurisdiction of the Recreation and Parks Department. Specifically, these entities consider whether the new shadow would be adverse to the use of a park, based on the qualitative criteria adopted in the 1989 Memo. These criteria consider the timing of the shadow (both time of day as well as time of year), as well as the size, duration, and location of the shadow, and the use patterns of those areas of the park that may be affected. The criteria also include consideration of whether the proposed development serves the public interest in terms of a needed use or contribution to urban form. If an ACL has been established for the park in question, these entities will also consider the quantity of shadow. If it is determined that the new shadow would not be adverse to the use of the park and if an ACL has been established for a given park and there is sufficient available ACL to accommodate that project, then the quantity of shadow will be "allocated" from the ACL to the proposed project and the "available" ACL for that park reduced accordingly.

In practice, the General Manager of RPD and the Recreation & Park Commission follow this process at a public hearing, with the General Manager forwarding a recommendation to the Planning Commission following consultation with the Recreation and Park Commission. Then, the Planning Commission will consider the recommendation of the General Manager of RPD, whether the new shadow is adverse to the use of the park, and whether to allocate a portion of the ACL to the project if an ACL has been adopted.

⁵ Civic Center (1.0% ACL), Union Square (0.1% ACL), Justin Herman Plaza (0.1% ACL). As noted above, since 1989, the joint Commissions have revised the Memo on nine occasions to increase ACLs on various parks, though no additional qualitative criteria specific to other parks have been adopted.

TRANSIT CENTER DISTRICT PLAN CUMULATIVE SHADOW ANALYSIS

The following table from the Plan FEIR summarizes the Section 295 parks that could feature net new shading by buildings consistent with the height limits adopted as part of the Plan. There are no Recreation & Parks Department properties in the Plan area. All of the potentially affected open spaces are north of Market Street. The nearest parks are over 1,000' feet away from any buildings that might shade them, and most of the potentially affected open spaces are ½-mile or more from the Plan area buildings.

SHADOW ON SECTION 295 PARKS FROM DEVELOPMENT IN THE PLAN AREA

Open Space	Existing Shadow ¹	Permitted Shadow ²	Shaded By: ³	Plan Shadow ⁴	Shadow w/Plan ⁵	Time/Date of Net New Shadow	Maximum Shadow ⁶
Union Square ⁷	38.30%	0.1% (0.098%)	Pal., 50 F, TT, GGU, 181 Fmt.	0.19%	38.5%	mid-March – late September – 7:10 - 8:40 a.m.	24.5% (8:00 am, early Apr. & early Sept.)
St. Mary's Square ⁸	51.90%	0.0%	TT, 50 F, GGU	0.09%	52.0%	mid- Sep – mid-October; late February – late March –8:10 - 9:10 a.m.	26.3% (8:45 am, mid-Mar. & late Sept.)
Portsmouth Square	39.00%	0.0%	TT, 50 First	0.41%	39.4%	late October – mid-February – 8:00 - 9:10 a.m.	42.5% (8:30 am, mid-Jan. & late Nov.)
Justin Herman Plaza ⁹	37.60%	0.1% (0.007%)	TT, 50 F, 350 Msh.	0.09%	37.7%	early November - early February – 1:00 - 2:40 p.m.	10.1% (1:15 pm, early Jan. & early Dec.)
Willie "Woo Woo" Wong Plgrd.	52.80%	0.0%	P-F; GGU	0.03%	52.83%	early November. - early December; January – 8:00 - 8:20 a.m.	15.1% (8:15 am, mid-Jan. & late Nov.)
Maritime Plaza	68.40%	0.0%	Transit Tower	<0.01%	68.4%	early to mid-December; late December- early January – 10:40 to 11:05 a.m.	1.9% (10:45 am, late December)
Woh Hei Yuen Park ¹⁰	n/a	n/a	Transit Tower	<0.01%	n/a	Early November and early February, approximately 7:45 a.m.	1.9% (7:44 am,* late Jan. & early Nov.)
Chinese Recreation Ctr.	n/a	0.0%	Transit Tower	<0.01%	n/a	Mid-October and mid-February, approximately 8:25 a.m.	36.5%(8:23 am,* late Feb. & mid-Oct.)
Boeddeker Park ¹¹	37.70%	0.244% (0.000%)	Transit Tower	<0.01%	37.70%	early June – early July, from 6:50 to 7:00 a.m.	2.9% (6:47 am,* late June)

¹ Existing Shadow is the existing amount of shadow cast by existing buildings, measured by the percentage of theoretical annual available sunlight (TAAS) that would be available if no existing buildings were present (based on 1989 Planning Department analysis). TAAS is computed by multiplying the area of each park by 3,721.4 (number of hours covered by Sec. 295). n/a – Not Available

² Permitted Shadow is the additional amount of net new shadow allowed (the Absolute Cumulative Limit) under Sec. 295 for each park. This includes any changes that have occurred since 1989. Bottom figure (in parentheses) indicates remaining budget available, if applicable.

³ Shaded By indicates Plan area buildings that would shade each park: TT – Transit Tower; Pal. – Palace Hotel tower addition; 50 F – 50 First Street; 181 Fmt. – 177 – 187 Fremont; GGU – Golden Gate University site tower; P-F – TJPA Parcel F; 350 Msh. – 350 Mission Street tower (at 700 feet, in accordance with the draft Plan height; this is taller than the 375-foot-tall approved project at this site).

⁴ Plan Shadow is the amount of net new shadow, given as an approximate percentage of the theoretical annual available sunlight, that would be cast on each park on an annual basis.

⁵ Shadow w/Plan is the percentage of theoretical annual available sunlight that would be shaded by existing building plus the proposed project, on an annual basis. Top number is entire Transit Tower; bottom number excludes rooftop element.

⁶ Maximum Shadow is the greatest amount of each park that would be newly shaded by Plan area buildings at any one moment. Percent of park area that would be shaded is given first column; dates and time in parentheses). Asterisk (*) indicates time is first minute subject to Section 295.

⁷ The shadow budget remaining within the Absolute Cumulative Limit (ACL) for Union Square has been partially reduced since 1989. In 2004, 69,540 square foot hours was allocated to a project at 690 Market Street, which rehabilitated and expanded the historic De Young (Chronicle) Building, now the Four Seasons Residences, reducing the 0.1 percent budget by 0.02 percent.

⁸ Existing sunlight and existing shadow coverage for St. Mary's Square, as calculated by the Planning Department, assumed future expansion of this park.

⁹ The shadow budget remaining within the Absolute Cumulative Limit (ACL) for Justin Herman Plaza has been reduced since 1989, when an ACL for this park was established at 0.1 percent, by the allocation of most of the shadow budget. In 2000, the Planning Commission allocated more than nine-tenths of the available shadow under the 0.1 percent ACL to the Hotel Vitale at Spear and Mission Streets, reducing the remaining available shadow to 0.008 percent of theoretical annual available sunlight. In 2008, the Commission allocated an additional 0.001 percent of the available shadow to a proposed vertical expansion of an office building at 100 California Street (Case No. 2006.0680K), reducing the remaining available shadow to 0.007 percent of theoretical annual available sunlight. This latter project has not been constructed.

¹⁰ No Absolute Cumulative Limit has been established for Woh Hei Yuen Park.

¹¹ The Absolute Cumulative Limit (ACL) for Boeddeker Park has been adjusted three times since 1989, to accommodate the Emporium/Bloomingdales project (amendment to the Yerba Buena Center Redevelopment Project, for which the ACL was increased from 0.0% to 0.007%); the Tenderloin Neighborhood Development Center (TNDC) Curran House residential project at 145 Taylor Street (0.087%); and, most recently, in 2009, the TNDC Eddy & Jones Family Housing Project (0.244%). This latter project has not yet been constructed.

SOURCE: San Francisco Planning Department; CADP; Environmental Science Associates

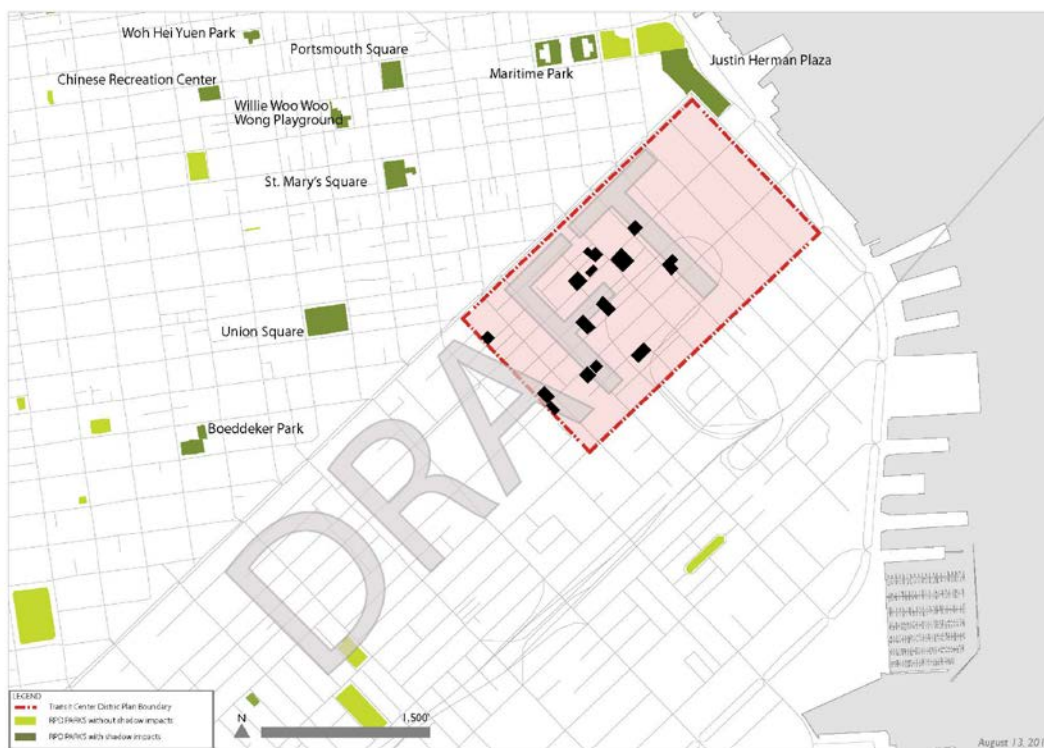
All of the parks listed in the table, except for Woh Hei Yuen Park, have quantitative shadow "budgets" adopted as policy by the joint Commissions⁶. Additionally, the 1989 Memo includes Qualitative Criteria to be used generally to evaluate new shadows on parks to determine adversity, including criteria specific to the four downtown parks with ACLs greater than 0.0%.

To enable the buildings envisioned in the adopted Plan and rezoning to proceed, the Recreation and Parks Commission and Planning Commission will jointly have to make the appropriate findings pursuant to Section 295 that the shadows cast by the Plan's buildings would not adversely affect the usage of the parks in question. Cumulatively, as indicated in the table, a total

⁶ See Footnote 1.

of seven building sites in the Plan area could add shading to nine Recreation and Park Department properties. As the cumulative potential increased shadows from the Plan's buildings would exceed the available budgets for eight of these parks, the Commissions would need to amend these budgets as indicated in the table. Assuming that there is available budget for one or more parks that might be shaded by a specific building proposal, the particulars of that building proposal would be considered at the time of entitlement of that project by the Recreation and Parks General Manager regarding a determination that the new shadows from that particular development project is not adverse to the use of the parks. Upon receiving such a determination from the General Manager, the Planning Commission would consider whether the shadows from the project are adverse to the use of the park. If the Planning Commission determines that the shadows are not adverse, it would "allocate" any available budget for the park(s) to the development project in question as part of the entitlement actions for that project.

Transit Center District Plan: Needs of Surrounding RPD Properties + Shadow Impacts
Map 1: Transit Center District Plan and RPD Properties



Attached to this Staff Report is an analysis of each potentially affected open space, including a description of magnitude, duration of the new shading and the relationship of the net new shading to the overall layout and usage of each park. For four of the largest and heavily used open spaces among these nine, the Planning Department conducted field observations and collected data on usage of each park before, during, and after the times of day that potential new shading from the TCDP would occur. The filed observations, conducted in half-hour intervals,

noted the total number of individuals using the park, including those passing through, engaged in stationary activities, exercise, play, or other notable activities. Areas of sun and shade were also noted. This data was mapped. These observations were conducted on a weekday in August 2012.

The Transbay Tower would add new shading to eight downtown parks, seven⁷ of which have ACLs. This information is also provided in the attached analysis for each park.

PARK SHADOW TASK FORCE

At the request of Mayor Gavin Newsom and Board of Supervisors President David Chiu, the Planning Department facilitated the formation of a task force to review and analyze the manner in which projects casting shadow upon Recreation and Parks Department properties are reviewed by the two Commissions. The Task Force held five public meetings between September 2010 and May 2012. In May 2012 the co-chairs of the Task Force jointly issued a "Closing Statement," including the following recommendation:

"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."

While the Commissions have most commonly considered the characteristics of specific individual development projects in relation to approvals pursuant to Section 295, given the comprehensive and integrated nature of the Transit Center District Plan, the Planning Department believes that the Commissions should consider whether it might be more prudent to modify shadow budgets cumulatively. This is a key question for the Commissions to consider as part of future discussions related to the Plan, its shadow analysis, and resulting actions.

CONSIDERATIONS FOR CUMULATIVE REVISION TO ACLS FOR THE PLAN

Since 1989, the Commissions have approved 23 development projects (some of which have not been built) that would add net new shadow to Recreation and Park Department properties. As part of these approvals, the Commission have amended the quantitative budgets first established in the 1989 memo for certain of these parks on nine occasions, generally in the course of considering approval of one or more specific building proposals that might add new shadow to certain parks in excess of the available budgets at that time.

⁷ See Footnote 1 regarding Chinese Recreation Center.

In order to implement the Plan, the Planning Department recommends amending the 1989 Memo to comprehensively revise the ACLs for eight downtown parks based on the cumulative potential shading by future buildings anticipated in the Plan's zoning framework and as analyzed in the Plan's certified EIR.

Based on the analysis in the Plan EIR and the additional detailed analysis of each park, Planning Department staff believes that the net new shading from the Plan's buildings cumulatively are modest and would not adversely affect the use the parks in question. Therefore, amending the 1989 Memo and increasing the ACLs for the eight parks by the quantitative amounts described in the Plan EIR accompanied by the adoption of implementation criteria for each park limiting potential new shadows to those meeting the characteristics described in the EIR⁸, would be consistent with the requirements and intents of Section 295 and Proposition K. Additionally, development of buildings consistent with the adopted Plan would provide substantial public benefit, particularly in providing \$420 million for construction of the Transit Center and Downtown Rail Extension, over \$150 million for open space and streetscape improvements in the Plan area (including over 12 acres of new open space in the Plan area), \$12.5 million for open space improvements outside of the Plan area, and over one thousand units of affordable housing, in addition to providing tremendous regional environmental benefits by locating concentrations of activity immediately adjacent to the region's best transit facilities.

The intention of the Downtown Plan was to shift growth south of Market Street, particularly to the area around the Transbay Transit Center, in order to reduce development pressure north of Market Street, preserve historic buildings, and reduce the encroachment of the central business district into surrounding neighborhoods to the north and northwest, such as Chinatown, North Beach and the Tenderloin. This Plan is the manifestation of that, and is a fuller consideration of the overall landscape of the downtown and its growth for the next generation. This consideration includes the distribution and quantity of open space in the downtown. The standards and criteria in 1989 Memo were adopted based on the understanding of the Commissions at that time as to the evolution of the downtown and the broad considerations involved in interpreting and implementing the sunlight protection ordinance. A key emphasis was clearly on north of Market Street parks based on the development controls then recently adopted in the Downtown Plan and the desire to shift growth south of Market Street. At the time the open spaces north of Market Street were the only open spaces to speak of in the Downtown, and as such, were given heightened consideration⁹, absent a clear vision for how the south of Market area might develop, including the future availability of open space. Given a new landscape, now 23 years later, of a specific plan for much broader availability of open space in the downtown, including sunny open space, the criteria for evaluating these parks and the specific numeric ACLs for individual parks

⁸ Including location, extent, duration, time of day, and time of year.

⁹ A demonstration of this fact is that ACLs were adopted for only 14 open spaces citywide, all downtown and almost all north of Market Street. It is notable that of the 25 occasions in which the Commissions have approved projects that add shadow to parks, 9 of these occasions were on parks without ACLs outside of the downtown.

could reasonably be adjusted while still being consistent with the requirements of Section 295 and a conservative approach to preventing significant amounts of shadows from adversely affecting parks. It is important to note that in establishing the various ACLs for various parks in the 1989, the Commissions did consider the zoning plans in place or under consideration at the time and the potential impacts of future buildings consistent with those plans. For instance, the 1987 and 1989 Memos speak specifically to the fact that the Civic Center Plan called for the creation of a new Main Library building that, if built to the heights considered otherwise appropriate for the district, would add shading to Civic Center Plaza, and therefore the ACL for Civic Center Plaza was set a high-enough amount to allow that building to proceed.

The 1989 Memo, in considering the impacts of specific buildings, allows the Commission to consider the "public benefit" of the projects in question. The Commissions have considered such questions of public benefit holistically in evaluating both the question of revising an ACL for a particular park at the same time as whether the shadow from a particular building would adversely affect the usage of that park. The potential impacts or benefits of individual buildings in the Transit Center District Plan would not be reasonably evaluated independently of their role in the broader Plan. While consistent with its overarching policy objectives, the Transit Center District Plan is a comprehensive revision and update to key aspects of the Downtown Plan based on contemporary issues, investments, and realities. Shadow considerations and a robust shadow analysis were an important factor in shaping the adopted height limits, location of such tall buildings, and overall urban form. The public benefits of each building are their contributions to the overall program (which among other benefits funds the creation of over 12 acres of open space and provides over \$400 million to a major public transit project) and not a piecemeal building-by-building benefit. The public benefits of a Plan would be obscured by a piecemeal evaluation scenario and would undermine the core purposes of doing comprehensive planning for development, open space, and other public benefits.

One goal of the Downtown Plan, more fully fleshed out in the TCDP, is the expansion of the open space system South of Market Street in the area around the Transit Center, as well as the further enhancement. The TCDP lays out a detailed vision of the creation and funding of over 12 acres of new publicly-owned open space, the realization of which is made possible by the development of several tall buildings, some of which unavoidably cast very modest amounts of shadow on some distant north of Market parks.

As such, adjustments to the 1989 Memo should be considered holistically in light of the newly adopted revision to the Downtown Plan. The nine prior instances since 1989 when the Commissions have adjusted ACLs, they have mostly done so in consideration of individual project proposals outside of the context of a broad comprehensive plan. The Plan is the result of the City's public initiative to rethink how best to comprehensively achieve the Downtown Plan's objectives based on today's considerations and how best to achieve the broadest improvements to livability, economic development, and sustainability to the downtown area and beyond. It is arguably more consistent with the intent, methodology, and considerations underlying adoption of the ACLs in the original 1989 Memo to revise it in a comprehensive manner based on a comprehensive consideration of the downtown's development and open space patterns and needs rather than on a strictly project-by-project basis.

PROPOSED ACTIONS AND PROCESS

A joint hearing is scheduled for October 11, 2012 for the Planning and Recreation and Parks Commissions. In order to implement the Plan, the Planning Department recommends revising the 1989 Memo to comprehensively revise the ACLs for eight downtown parks based on the cumulative potential shading by future buildings anticipated in the Plan's zoning framework and as analyzed in the Plan's certified EIR. Amending the 1989 Memo to revise the ACLs requires a joint action by the Planning and Recreation & Parks Commissions. In amending the Memo and revising the ACLs pursuant to the Plan, the Department recommends that the Commissions adopt criteria that restricts allocation of newly available ACL for these parks only to buildings whose net new shadow profiles are consistent with the characteristics of shadows described in the certified EIR, in terms of location and extent of shadows, duration, time of day, and time of year. Staff also recommends that the Commissions adopt an evaluation condition for these parks that future projects must demonstrate that reasonable efforts have been made to refine final building designs in order to reduce shadow impacts below those anticipated in the Plan's EIR.

Following action by the joint Commissions, at the October 11 hearing, the General Manager of RPD and the Recreation & Park Commission will be asked to consider making a recommendation regarding whether the shadows being cast by the Transbay Tower project (101 1st Street) are adverse to the use of the various affected parks. At a subsequent hearing on October 18, 2012, the Planning Commission will consider the recommendation of the RPD General Manager and make its own determination as to whether the Transbay Tower project shadows are adverse, and whether to allocate from the budgets of the various ACLs to the project.

Below is a chart indicating the proposed revisions to the ACLs for the various parks, as well as the specific amounts attributable and proposed to be allocated subsequently to the Transbay Tower project.

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 Playgroun	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	0%*	0.008%	0.008%*	0.008%*	0.008%	0%*
Boedekker Park	0%	0.003%	0.003%	0.003%	0.003%	0%
* Recent research has indicated that no ACL has ever been adopted for the Chinese Recreation Center. If this is finding is confirmed, no action would be proposed on October 11 regarding revising an ACL for Chinese Recreation Center.						

Individual Park Shadow and Use Analysis

Union Square

Union Square is an urban plaza at the heart of the downtown retail district, recently renovated in 2002. The plaza is primarily hardscaped and oriented to passive recreational uses, large civic gatherings, and ancillary retail. There are no recreational facilities. The Square features an expansive central open plaza, and is ringed by seating areas, landscaping, and small structures including a café. The southern edge along Geary Street features grass and concrete-covered seating terraces. Underneath the Square is a large public parking garage, whose entries are on Geary and Post Streets. An entry to a new subway station, part of the Central Subway project, will be constructed by SFMTA in the next few years at the southeast corner of the Square.

Existing Shadow Load:	38.3%. *
Potential TCDP Net New Shadow:	0.19%
Current Available ACL:	0.08%
Requested Increase in ACL:	0.11%
Time/Date of Net New Shadow:	Mid-March through Late September
Duration of Net New Shadow:	5 – 60 minutes
Time of Day:	Between 7:10 – 8:40 am; Day of Maximum extent 7:40 – 8:40am
1989 Memo Qualitative Criteria:	Avoid mid-day shadows
Net New Shadow from Transbay Tower:	0.011%
Date of Net New Transbay Tower Shadow:	Mid-July through Mid-August, May
Time of Day of Net New Transbay Tower Shadow:	7:30 – 8:00 am

** After the adoption of the ACL in the 1989 Memo, the Macy's expansion project added sunlight to Union Square amounting to approximately 0.05% of the theoretically available sunlight on the park. It should be noted, however, that the ACL for Union Square was not formally increased to account for this added sunlight.*

The net new shadow would sweep across various parts of the park depending on the time of year, however the shadows at times of maximum extent would occur in the southern edge of the park, on the terraced steps, garage driveway, and adjacent landscaping and circulation areas. The maximum area of new shadow is 24.5% of the park at 8:00 in early April and early September. The shading on these particular days would begin at 7:40am at the southwest corner part of the park, peak at 8:00am, and depart by 8:40am.

Park Usage Observations:

Observations were conducted between 7:00am and 9:30am. The weather was foggy at 7:00 and then mostly sunny by 9:00am. Stationary usage of Union Square as observed was very light during the morning hours. The primary usage of the Square was by people passing through, especially prior to 9:00am. At 7:30am, there were 22 individuals spending time in the Square while 20 individuals passed through the square without stopping. The number of individuals engaged in stationary activities ranged from 11-25 individuals at any one time prior to 9:00, increasing substantially after 9:00am to 97 individuals at 9:30am (at which time an additional 50 people passed through the Square without stopping). Prior to 9:00am most individuals engaged in stationary activities were clustered at the periphery of the square in fixed seating (formal and informal); Union Square staff set up movable seating between 8:00 and 9:30am. The individuals seated in the terraced steps at the southwest corner, where new shading would occur prior to 9:00am, were observed to be tourists waiting for tour buses, which pick up along the Geary Street curb. After 9:00am, a significant number of people began to occupy the movable chairs placed on the western portion of the square.

Analysis:

- Usage of the park is very light prior to 9:00am, during the time when the new shadows would fall on the parts of the park.
- Usage of the park at these hours is predominantly pass-through traffic, with few stationary users.

Portsmouth Square

Portsmouth Square is an urban plaza in the southeastern portion of Chinatown. The park features substantial grade changes and is subdivided into many sub-areas. Overall the plaza is primarily hardscaped with planted areas on the edges and scattered in planters throughout. There are two small children's play areas on different levels of the park. Formal and informal seating is scattered throughout the park. An elevated pedestrian bridge over Kearny Street connects the upper level of the park to the Hyatt Hotel on the east side of Kearny Street. At the lower level of the square, a community center is located underneath the pedestrian bridge. Below the Square is a large public parking garage, whose entry is on Kearny Street.

Existing Shadow Load:	39.0%.
Potential TCDP Net New Shadow:	0.41%
Current Available ACL:	0%
Requested Increase in ACL:	0.41%
Time/Date of Net New Shadow:	Mid-October to early December, early January to late February
Duration of Net New Shadow:	30 – 60 minutes
Time of Day:	Between 8:00 – 9:10 am; Day of Maximum extent 8:00 – 9:00am
1989 Memo Qualitative Criteria:	N/A

Net New Shadow from Transbay Tower:	0.133%
Date of Net New Transbay Tower Shadow:	Mid-October through early December, Early January through mid-February
Time of Day of Net New Transbay Tower Shadow:	8:00 – 8:40 am

The net new shadow would sweep across various parts of the park depending on the time of year, however the shadows at times of maximum extent would occur over the southwestern half of the park, on the upper plaza and the playgrounds. The maximum area of new shadow is 42.5% of the park at 8:30 in late November and mid January. The shading on these particular days would begin at 8:00am at the center of the park, peak at 8:30am, and depart by 9:00am.

Park Usage Observations:

Observations were conducted between 7:45am and 10:00am. The weather was sunny. Portsmouth Square is a very heavily used park and is an important gathering place for the Chinatown neighborhood. Throughout the times observed, users of the park were evenly dispersed throughout the park. The number of individuals engaged in stationary activities increased gradually from 44 at 8:30am to 67 at 9:00am to 118 at 10:00am. Notably there were significantly more individuals in the park at 7:45am—72 – before any sunlight reached the park than there were once the sun was mostly out at 8:30. An additional 20-40 individuals pass through the park at each of these times without stopping; with slightly more pass-through traffic at the later hours. People were seated throughout the park on formal, informal, and makeshift seating. Small groups and individual adults were observed exercising (tai chi) throughout the park, varying from the upper plaza, children's playgrounds, and lower plaza. Between 7-15 people were exercising in the park at all times, though the number of people engaged in seated or other stationary activities increased steadily throughout the morning. A few children were observed playing in the upper playground. Various areas of the park were shaded during the morning, and many of the shaded areas were heavily used, as much or more so than sunny areas at times. Groups engaged in exercise or socializing in large groups appeared to congregate in available open areas regardless of sun or shade.

Analysis:

- Usage of the park is heavy and constant, substantially increasing after 9:00am
- Park usage is heavy even before the sunlight reaches the square in the early morning.
- Usage of the park is dispersed evenly throughout the park, with users spreading themselves out to take advantage of open and available areas for gathering or exercise, regardless of sun/shade or the intended use of the space. For instance, adults use children's play areas to exercise.
- Some shaded areas of the park are very heavily used, particularly as usage of the park increases and the density of users increases.

St. Mary's Square

St.Mary's Square is a small urban park on the edge of northern Financial District and southern edge of Chinatown. The park is a level platform on a steeply-sloped hill, sited atop a parking garage. Access to the park is provided where both Pine and California Streets meet Quincy Street, a small alley, as well as directly from Quincy. Overall the plaza is characterized by meandering hardscape areas around extensive planters. A small children's play area is in the northeast corner of the park and a swingset is located in the southeast corner. Formal and informal seating is scattered throughout the park.

Existing Shadow Load:	51.9%.
Potential TCDP Net New Shadow:	0.09%
Current Available ACL:	0%
Requested Increase in ACL:	0.09%
Time/Date of Net New Shadow:	Mid-September to mid-October, late February to late March
Duration of Net New Shadow:	5 – 40 minutes
Time of Day:	Between 8:10 – 9:10 am; Day of Maximum extent 8:30 – 9:10am
1989 Memo Qualitative Criteria:	N/A
Net New Shadow from Transbay Tower:	0.048%
Date of Net New	
Transbay Tower Shadow:	Mid-September through early October, March
Time of Day of Net New	
Transbay Tower Shadow:	8:30 – 9:10 am

The net new shadow would sweep across various parts of the park depending on the time of year, however the shadows at times of maximum extent would occur over the southwestern half of the park, on the upper plaza and the playgrounds. The maximum area of new shadow is 26.3% of the park at 8:45am in late September and mid-March. The shading on these particular days would begin at 8:30am at the southwest of the park, peak at 8:45am, and depart by 9:10am.

Park Usage Observations:

Observations were conducted between 8:30am and 10:00am. The weather was sunny. The number of individuals engaged in stationary activities stayed constant from 20 at 8:30am to 19 at 10:00am, with as few as 12 people at 9:30am. No more than one or two children were observed at any one time. The primary usage of the park observed before 10:00am is exercise/tai chi. Small groups of 3-4 people and individual adults were observed exercising (tai chi) throughout the park. Throughout the times observed, users of the park were evenly dispersed throughout the park. No more than one child was observed in the play area at any one time. Most of the park was shaded during the hours of observation, with the southern one-third becoming sunlight by 9:30am.

Analysis:

- St. Mary's is a lightly-used park during the morning hours. Usage does not increase substantially as the morning progresses and sunlight increases.
- Usage of the park is dispersed evenly throughout the park regardless of sun/shade. Park users remain evenly divided between sunlit and shaded areas even after more of the park becomes sunlight as the morning progresses.
- The majority of park users in the morning are engaged in tai chi/exercise in small groups of 3-4 or individually. These groups gather where open areas exist regardless of sunlight/shading.
- The park is already heavily shaded during the morning hours due to its location in the Financial District adjacent to tall buildings.

Justin Herman Plaza

Justin Herman Plaza is a large urban open space of varying character on the eastern edge of the Financial District. It sits at the foot of Market Street, separated from the Ferry Building by the Embarcadero Roadway. The property is comprised of three primary areas: the northern plaza, the Market Street extension, and the southern park. The northern area is dominated by a large open hardscape plaza, sunken by a couple feet from street level. The sunken plaza is bordered on its western edge by an extensive area of public seating serving ground level eateries at the eastern edge of the Embarcadero Center and hotel complex that borders the Plaza north of Market Street. The northern side of the plaza is dominated by the large Vallainourt Fountain. A raised circular stage with steps is located on the eastern portion of the sunken plaza. Formal walkways with landscaping, benches and informal seating walls line the east side of the plaza. There are no formal recreational facilities in the northern part of the park. The Market Street extension area aligns generally with the Market Street right-of-way and is characterized by open hardscape and rows of palm trees. The southern portion of the property is a rectangular park, with formal seating and landscaping surrounding a sunken area occupied by bocce courts and a lawn area.

Existing Shadow Load:	37.6%.
Potential TCDP Net New Shadow:	0.09%
Current Available ACL:	0.007%
Requested Increase in ACL:	0.083%
Time/Date of Net New Shadow:	Early November - Early February
Duration of Net New Shadow:	30 – 60 minutes
Time of Day:	Between 1:00 – 2:40 pm; Day of Maximum extent 1:10 – 1:40pm and 2:10 – 2:40pmpm
1989 Memo Qualitative Criteria:	N/A
Net New Shadow from Transbay Tower:	0.011%
Date of Net New Transbay Tower Shadow:	Mid-November through late January

Time of Day of Net New
Transbay Tower Shadow: 1:10 – 1:40 pm

The net new shadow would sweep across various parts of the park depending on the time of day, however the shadows at times of maximum extent would occur over the southern portion of the sunken plaza, including part of the stage, the steps along the edge of the plaza, and small portions of the landscaping and palm trees along the eastern and southern edges of the sunken plaza. No new shading would be cast on the southern portion of the park south of the Market Street extension. The maximum area of new shadow is 10.1% of the park at 1:15pm in early December and early January. The shading on these particular days would begin at 1:10pm on the southern part of the sunken plaza in the northern part of the park, peak at 1:15pm, and depart by 1:40pm, then reappear at 2:10pm over the Market Street extension and disappear by 2:40pm. The two distinct periods are due to shading from different buildings occurring at different times. The shading during the first period would be theoretically cast by the unenclosed sculptural lattice top of the Transbay Tower.

Park Usage Observations:

Observations were conducted between noon and 3:00pm. The weather was sunny. The number of individuals (180) engaged in stationary activities was the same at noon and 3pm, and peaked at 1:00pm with 273 individuals stationary in the park. The primary usage of the park during these hours is seated lunchtime eating and related stationary socializing by downtown workers, with the exception that the Market Street extension area is used heavily by people walking and bicycling through en route to the Ferry Building and Embarcadero waterfront and by two facing rows of artist's market booths intended to serve this pedestrian traffic. (The user counts include people who were stopped to look at market booths, but not those passing through the market area without stopping.) Significant numbers of people utilize formal and informal seating and lawn areas around the periphery of the plaza, with the heaviest concentrations of people in the seating areas adjacent to the eateries on the west edge of the plaza.

Analysis:

- The Plaza is most heavily used before 2:30pm by downtown workers seeking places to eat lunch.
- Usage of the park is heavily dispersed to its edges where seating opportunities exist. Some areas with formal seating are heavily used despite shading.
- The new shading would primarily fall on circulation areas and areas of sporadically used informal seating.
- The fleeting shadows on the Market Street extension would not likely affect the through-traffic and market activities.
- Most of the new shadow would be primarily cast by the narrow and unenclosed sculptural lattice-like top of the Transbay Tower, such that any new shading cast by this element would likely be diffuse if apparent at all on the ground.

Willie "Woo Woo" Wong Playground

Willie "Woo Woo" Wong Playground (formerly "Chinese Playground") is a small urban park in the comprised almost exclusively of active recreational courts (basketball, tennis, volleyball), two children's play areas, and a recreation center building. There is little natural landscaping. The park is bordered by Sacramento Street on the south and Hang Ah Street, a very narrow alleyway, on the west. Hang Ah serves as an extension of the park, as it is primarily pedestrian with little traffic, and features benches along the park edge.

Existing Shadow Load:	52.8%.
Potential TCDP Net New Shadow:	0.03%
Current Available ACL:	0.0%
Requested Increase in ACL:	0.03%
Time/Date of Net New Shadow:	Early November - Early December; January
Duration of Net New Shadow:	20 minutes
Time of Day:	Between 8:00 – 8:20 am; Day of Maximum extent 8:00 – 8:20am
1989 Memo Qualitative Criteria:	N/A
Net New Shadow from Transbay Tower:	N/A

The net new shadow would sweep over portions of the southern sport court and the children's play area along the Sacramento Street edge between 8:00-8:20. The maximum area of new shadow is 15.1% of the park at 8:15 in late November and mid-January.

Analysis:

- The new potential shadow is of very limited duration during the early mornings in late fall and early winter.
- At the time of day when the new shadows would fall, there is unlikely to be significant usage of the play area or sport court, as children are generally in school at these times of day during these times of year.

Maritime Plaza

Maritime Plaza is an elevated plaza located above a parking structure immediately north of the Embarcadero Center. The plaza contains some lawn area, vegetation, sculptures, and a fountain. There are few seating facilities in the plaza. The park is divided into two halves by a high-rise office building. Low-scale commercial buildings sit in the middle of both halves of the park. Because of it was created in this location, it is heavily shaded year round. Access is provided via the adjacent office buildings, a skybridge from the Embarcadero Center, and via stairways connected to the parking structure. The plaza has little to no visibility nor clear and direct access from the surrounding streets.

Existing Shadow Load:	68.4%.
Potential TCDP Net New Shadow:	0.004%
Current Available ACL:	0.0%
Requested Increase in ACL:	0.004%
Time/Date of Net New Shadow:	Early to Mid-December; - Late December to Early January
Duration of Net New Shadow:	25 minutes
Time of Day:	Between 10:40 – 11:05 am; Day of Maximum extent 10:40 – 11:05 am
1989 Memo Qualitative Criteria:	N/A
Shadow from Transbay Tower:	Same as Above

The shadow falls on the southernmost third of a very skinny and long north-south slice of sun that tracks across the western half of the plaza in the morning. The area featuring circulation, landscaping, sculpture, and informal seating areas. This shadow occurs when the Transbay Tower lines up briefly with the narrow gap between Embarcadero Center towers; the shadow is primarily cast by the rooftop sculptural top of the Tower. The maximum area of new shadow is 1.9% of the park at 10:45am in late December.

Analysis:

- New shadow would be primarily cast by the narrow and unenclosed sculptural lattice-like top of the Transbay Tower, such that any new shading cast by this element would likely be diffuse if apparent at all on the ground.
- The new potential shadow is of very limited duration during mid-morning times of very little park usage, prior to mid-day lunch hours when the park sees most of its usage.
- Overall the park gets very little usage, in large part due to its difficult access, lack of visibility, and lack of unique interest or recreational facilities, combined with its close proximity to the waterfront and other more inviting public spaces.

Chinese Recreation Center

The Betty Ann Ong Chinese Recreation Center is located at 1199 Mason Street, bordered by Washington, Mason, and Truett Streets. The Recreation Center underwent a complete reconstruction and renovation from 2010-2012 and was re-opened in July 2012. The facility features a 3-story indoor recreation building and a 12,500 square foot outdoor active recreation area that includes children's play equipment, a basketball court, and seating.

Existing Shadow Load:	N/A
Potential TCDP Net New Shadow:	0.008%
Current Available ACL:	0%*

Requested Increase in ACL:	0.008%*
Time/Date of Net New Shadow:	Mid October; Mid February
Duration of Net New Shadow:	5 minutes
Time of Day:	8:25am
	Day of Maximum extent 8:25am
1989 Memo Qualitative Criteria:	N/A
Shadow from Transbay Tower:	Same as Above

** Recent research has indicated that no ACL has ever been adopted for this facility. If this is concluded to be the case, no action would be proposed on October 11 regarding revising an ACL for Chinese Recreation Center.*

The shadow would predominantly fall on a portion of the roof of the Recreation Center building.

Analysis:

- The net new shadow is of extremely limited duration in the early morning and occurs at the very first minute of analysis in the morning, departing immediately thereafter.
- The shadow would fall on a portion of the roof of the Recreation Center building. Because of its location, the shadow would not be visible or apparent to any user of the park or the Recreation Center building.
- The Recreation Center building was just completed and opened to the public in 2012.

Boeddeker Park

Boeddeker Park is a nearly 1-acre park in the Tenderloin neighborhood. The main part of the park is located at the northeast corner of Eddy and Jones Streets, and a smaller extension of the park extends to a mid-block location on Ellis Street. Since 2007, the Recreation and Parks Department has been engaged with the Trust for Public Land to redesign the park to improve its usability, safety, and attractiveness. A concept plan for the park has been completed and construction is slated to begin in 2013 and last 2 years. The renovated park is slated to feature a lawn, basketball court, children's play area, plaza, seating, and a small community center building in the main park area, and adult fitness areas with planters in the Ellis Street extension area.

Existing Shadow Load:	37.7%
Potential TCDP Net New Shadow:	0.003%
Current Available ACL:	0%
Requested Increase in ACL:	0.003%
Time/Date of Net New Shadow:	Early June – Early July
Duration of Net New Shadow:	5 minutes
Time of Day:	6:47 – 7:00 am

1989 Memo Qualitative Criteria:	Day of Maximum extent 6:47 – 6:52am N/A
Shadow from Transbay Tower:	Same as Above

The shadow would fall in two locations, both on small portions of the outer street edges of the park, one along the Jones Street edge and one on the Ellis Street edge. In both cases, the shadow would fall on service entries and raised planters, based on the proposed design for the park renovation. The shadow would not touch any of the proposed active or passive recreational areas.

Analysis:

- The net new shadow is of extremely limited duration in the very early morning and occurs at the very first minutes of analysis in the morning, departing immediately.
- The shadow would fall on small portions of the park's fenced edges on raised planters and service gates where public usage is not expected.
- The Recreation and Park Department has tentatively stated an intent to open the renovated park from dawn to dusk, though historically the park has been open limited hours (9:30am-6pm) and has not been open to the public during the hours of the potential shadows.

Woh Hei Yuen Park

Woh Hei Yuen Park is a small (1/3-acre) park in Chinatown located at Powell and John Streets. The park was opened in 1999. The park is surrounded and immediately abutted by 4-story residential buildings. Woh Hei Yuen features a children's play area on its western side, picnic tables beneath an arbor along the John Street edge, and an open plaza bordered by lawn and landscaping and benches occupies its eastern portion toward Powell Street. Access is provided from both John and Powell Streets. A narrow 2-story recreation center (922 Jackson Street) with a roof deck connects the southern edge of the park to Jackson Street.

Existing Shadow Load:	N/A
Potential TCDP Net New Shadow:	0.001%
Current Available ACL:	N/A (none established)
Requested Increase in ACL:	N/A (none proposed)
Time/Date of Net New Shadow:	Early November; Early February
Duration of Net New Shadow:	<10 minutes
Time of Day:	7:44-7:50am
	Day of Maximum extent 7:44-7:50am
1989 Memo Qualitative Criteria:	N/A

Shadow from Transbay Tower: Same as Above

The shadow falls on the John Street edge touching a small part of the plaza and part of the picnic table area beneath the arbor.

Analysis:

- The net new shadow is of extremely limited duration and time during the year, and occurs at the very first minute of analysis in the morning, departing immediately thereafter.
- The new shadow touches only the street edge along John Street, which is already shaded by an arbor structure. Primary usage of the park at these early morning hours is for exercise (tai chi) in the open plaza areas, and the net new shadow would not substantially shade this area.
- No Absolute Cumulative Limit has been established for the park. The park was created a decade after the 1989 memo.

Planning Code Section 295

295. HEIGHT RESTRICTIONS ON STRUCTURES SHADOWING PROPERTY UNDER THE JURISDICTION OF THE RECREATION AND PARK COMMISSION.

(a) No building permit authorizing the construction of any structure that will cast any shade or shadow upon any property under the jurisdiction of, or designated for acquisition by, the Recreation and Park Commission may be issued except upon prior action of the City Planning Commission pursuant to the provisions of this Section; provided, however, that the provisions of this Section shall not apply to building permits authorizing:

- (1) Structures which do not exceed 40 feet in height;
 - (2) Structures which cast a shade or shadow upon property under the jurisdiction of, or designated for acquisition by, the Recreation and Park Commission only during the first hour after sunrise and/or the last hour before sunset;
 - (3) Structures to be constructed on property under the jurisdiction of the Recreation and Park Commission for recreational and park-related purposes;
 - (4) Structures of the same height and in the same location as structures in place on June 6, 1984;
 - (5) Projects for which a building permit application has been filed and either
 - (i) a public hearing has been held prior to March 5, 1984 on a draft environmental impact report published by the Department of City Planning, or
 - (ii) a Negative Declaration has been published by the Department of City Planning prior to July 3, 1984;
 - (6) Projects for which a building permit application and an application for environmental evaluation have been filed prior to March 5, 1984 and which involve physical integration of new construction with rehabilitation of a building designated as historic either by the San Francisco Board of Supervisors as a historical landmark or by the State Historic Preservation Officer as a State Historic Landmark, or placed by the United States Department of the Interior on the National Register of Historic Places and which are located on sites that, but for separation by a street or alley, are adjacent to such historic building.
- (b) The City Planning Commission shall conduct a hearing and shall disapprove the issuance of any building permit governed by the provisions of this Section if it finds that the proposed project will have any adverse impact on the use of the property under the jurisdiction of, or designated for acquisition by, the Recreation and Park Commission because of the shading or shadowing that it will cause, unless it is determined that the impact would be insignificant. The City Planning Commission shall not make the determination required by the provisions of this Subsection until the general manager of the Recreation and Park Department in consultation with

the Recreation and Park Commission has had an opportunity to review and comment to the City Planning Commission upon the proposed project.

(c) 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.

(d) The Zoning Administrator shall determine which applications for building permits propose structures which will cast a shade or shadow upon property under the jurisdiction of, or designated for acquisition by, the Recreation and Park Commission. As used in this Section, "property designated for acquisition by the Recreation and Park Commission" shall mean property which a majority of each of the Recreation and Park Commission and the City Planning Commission, meeting jointly, with the concurrence of the Board of Supervisors, have recommended for acquisition from the Open Space Acquisition and Park Renovation Fund, which property is to be placed under the jurisdiction of the Recreation and Park Commission.

(Added Ord. 62-85, App. 1/31/85)



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MEMORANDUM

February 3, 1989*

TO: The City Planning Commission
The Recreation and Parks Commission

FROM: Department of Parks and Recreation
Department of City Planning

RE: Proposition K--The Sunlight Ordinance

BACKGROUND

The Sunlight Ordinance (Section 295 of the City Planning Code) requires the Planning Commission, prior to the issuance of a permit for a project that exceeds 40 feet in height, to make a finding that any shadow on property under the jurisdiction of the Park and recreation Department cast by the project is insignificant.

The Ordinance further requires that the Planning Commission and the Parks and Recreation Commission jointly adopt the criteria to be used by the Planning Commission in the implementation of the Ordinance.

PROPOSED CRITERIA FOR DETERMINING SIGNIFICANCE

The approach recommended by staff involves two steps. The first step is to set an absolute cumulative limit for new shadow allowed in an open space. The Absolute Cumulative Limit is the additional shadow-foot-hours expressed as a percentage of the total foot-hours for each park over a period of one year. The second step is to determine individual building impacts and allocate a portion of the additional allowable shadow among specific projects within the Absolute Cumulative Limit.

Details on the methodology for measuring and modeling shadows are explained in the memorandum to the Recreation and Parks Commission and the Planning Commission on "Proposition K--The Sunlight Ordinance," dated November 1, 1987.

Absolute Limit

It is recommended that a quantitative limit be set on the amount of new shadow (summed up over a period of one year) which could be allowed in each park based on the current shadow conditions in the park and the size of the park. A large park with little shadow could be permitted a larger Absolute Cumulative Limit than a smaller park with a lot of shadow, for example.

This absolute cumulative limit could be used up by one or more new buildings, but, the final determination of how much of this limit could be used by an individual building and what form the new shadow will take should be determined on a case by case basis. However, any shadow cast beyond this limit would be considered significant and could not be allowed.

Allocation of The Absolute Cumulative Limit Among Individual Buildings

Each open space has distinctive characteristics of existing shadows and the shadow that would be created by a new building. Each potential shadow also has distinctive characteristics. Depending on the proposed new building's location the shadow could be fast or slow moving (shadows of buildings near the open space will move through the open space slower than a building farther away from the open space). The proposed new building's height and location will also determine the size and shape of potential new shadow in the park, when (e.g. time of day, time of season) and where in the park the new shadow would be cast. Since a potential shadow may have immensely varied impacts at different times of day, or different seasons, or duration of the shadow, or the size or the location of the shadow, the evaluation of impact depends on a variety of qualitative factors.

The factors to be considered in allocating additional shadow within the Absolute Cumulative Limit will vary from park to park based on the characteristics of that park and the pattern of its existing shadows.

Qualitative criteria for each park should be based on existing shadow profiles, important times of day, important seasons in the year, size and duration of new shadows and the public good served by buildings casting new shadow. These bases are explained below:

Value of the Sunlight

Time of Day (morning, mid-day, afternoon)

Based on existing shadow conditions and location of a given park, the time of day values of sunlight will have to be established. For example, afternoon and morning sun resources may be more important for preservation in neighborhood parks whereas mid-day sun may be more important in downtown parks. Additionally, some parks may have more shadow during certain times of the day when compared with other parks.

Time of Year (Spring, Summer, Fall, Winter)

In the same way that the time of day value of sunlight has to be established, sunlight value during times of year will also have to be determined.

Shadow Characteristics

Size of Shadow

Small shadows will generally be preferred to large shadows unless they last for long periods of time or fall on parts of the park where sunlight is particularly critical to users.

Duration of Shadow

Shadows lasting a short period of time will generally be preferred to shadows which last a long time unless the fleeting shadows fall during a critical time of day or season and/or are so large that they disrupt use of the park.

Location of Shadow

Efforts should be made to avoid shadows in areas of the park where existing or future use of the park is intense and where a new shadow could have detrimental effects on park vegetation.

Building Characteristics

Public Good Served By Shadow Caster

Buildings in the public interest in terms of a needed use or building design and urban form may be allocated a larger portion of the Absolute Cumulative Limit than other buildings. For example, the Civic Center Urban Design Plan calls for a building at the same height as the existing library to continue the cornice on Marshall Square thus completing the gap in the framing of Civic Center Plaza. A new library building to accommodate the growing needs of the Public Library is proposed at that space. This new building would cast new shadows in the morning hours on Civic Center Plaza. If the new building could not cast shadows, the ability to use the site for the library would be severely limited. Most of the Civic Center Plaza shadow "budget" could perhaps be allocated to be used by this library.

STAFF PROPOSAL FOR CONSIDERATION BY BOTH COMMISSIONS

The Proposition K mandate is to minimize new shadow impacts and protect the sun resource on San Francisco open spaces. On the basis of several public hearings on the subject, the objective is to construe Proposition K very strictly in terms of the additional shadow on parks. In order to accomplish this objective an Absolute Cumulative Limit is proposed for each individual park. This limit is the additional amount of shadow-foot-hours expressed as a percentage of total-foot-hours of each park as measured by the Sunlight Access Computer System (SACS) developed for the City by the University of California at Berkeley. Additionally, for each open space, criteria for the approval of new buildings have been proposed to evaluate allocations within the Absolute Cumulative Limit.

There are two major factors affecting the impact of shadow on the use of a park which are relevant to setting standards. One is the size of the park and the other is the amount of existing shadow on the park. Taking these two factors into account the staff recommends that the following standards be adopted.

In smaller parks (less than two acres) which are already shadowed 20% or more of the time during the year, it is recommended that no additional shadow

be permitted. On this basis the Absolute Cumulative Limit should be set at zero for the following parks:

<u>Name Of Park</u>	<u>Absolute Cumulative Limit</u>
Maritime Plaza	0%
Embarcadero Plaza I (north)	0%
Portsmouth Square	0%
St. Mary's Square	0%
Boeddecker Park	0%
Chinese Playground	0%
Sgt. Macaulley Park	0%
Huntington Park	0%
South of Market Park	0%

In larger parks (two acres or more) which are shadowed between 20% and 40% of the time during the year it is recommended that up to an additional 0.1% of the current shadow should be permitted if the specific shadow meets the additional qualitative criteria for the park. On this basis the Absolute Cumulative Limit for the following parks should be set at 0.1%:

<u>Name of Park</u>	<u>Absolute Cumulative Limit</u>
Embarcadero Plaza II (south)	0.1%
Union Square	0.1%

Some parks, although within this category above, have surrounding height limits that preclude the possibility of any new shadow. Therefore, the Absolute Cumulative Limit for these parks should be set at 0%. These parks are:

<u>Name of Park</u>	<u>Absolute Cumulative Limit</u>
Washington Square	0%
North Beach	0%

In larger parks which are shadowed less than 20% of the time during the year, it is recommended that additional shadow of up to 1.0% could be permitted if the specific shadow meets the additional qualitative criteria for that park. On this basis the Absolute cumulative criteria for the following park should be set at 1.0%:

<u>Name of Park</u>	<u>Absolute Cumulative Limit</u>
Civic Center Plaza	1.0%

For the three parks on which additional shadow is recommended, it is further recommended that individual project shadows within the Absolute Cumulative Limit be allocated according to the following qualitative criteria for each park.

Union Square

- LOCATION:** Geary, Post, Powell, Stockton
Located in the center of the City's retail district.
- SIZE:** 105,515 square feet
This park ranks as the third largest Downtown park.
- CHARACTERISTICS:** The park is surrounded by tall buildings to the east, west and the south. This relatively flat formal park is slightly elevated from the surrounding streets. Features include park furniture for sitting and lawn areas. The greatest intensity of park use occurs during mid-day hours. Users are downtown workers, shoppers, tourists. Many pedestrians use the park as a mid-block crossing. This park is the location for many civic demonstrations and cultural activities. Union Square is near the Powell Street cable car line and major hotels. A parking facility is located beneath the park.

SUN AND SHADOW CONDITIONS:

Yearly Shadow:

38.3% of the total year round sunshine is used up by existing shadows. The shadow profile for this park is generally a "U" shaped shadow distribution with significant shadows in the morning and even greater shadows in the afternoon hours. The "U" shaped distribution is increasingly flat in the Winter due to increased mid-day shadows.

Seasonal Shadow:

- Summer:** Least shadow impacts - greatest sun resource. Shadowed in early morning and late afternoon with relatively more shadow during the afternoon hours. Approximately 30% of the sun resource is in shadows at the time of the Summer Solstice.
- Spring/Fall:** Major shadow impacts during the early morning and late afternoon hours. Morning shadows increase as Fall approaches. The least shadow impacts occur between 9:30 AM and 2:30 PM. During Equinox approximately 35% of the park sun resource is in shade.
- Winter:** The greatest shadow impacts on Union Square occur during the Winter months. In Winter, nearly 50% of the park is in shadow for the entire day. There is very little sunlight available before 9:30 AM and after 2:30 PM during the winter. The Winter Solstice conditions are such that 60% of the park sun resource is in shadow.

ADDITIONAL SHADOW

Absolute Limit:

Increase of up to 0.1% of total foot-hours for the park based on size and amount of existing shadow. A maximum of 392,663.5 new shadow foot-hours could be allowed.

Qualitative Criteria:

- Avoid additional shadows during mid-day.

Civic Center Plaza

LOCATION: Polk, Grove, Larkin, McAllister
In the Civic Center, with major government offices, library and Brook Hall surrounding the open space.

SIZE: 222,995 square feet
Civic Center Plaza is the largest downtown park.

CHARACTERISTICS: Heaviest use occurs during mid-day hours. Users are civic center workers, tourists and street people. Features include some park furniture for sitting, lawn area and fountain. This park is the location for many civic demonstrations, assemblies and cultural activities. This is a relatively flat formal park. A parking garage is located beneath the park. Adopted redesign of the park will accommodate more use by neighborhood children and day care providers.

SUN AND SHADOW CONDITIONS:

Yearly Shadow: 7.4% of the total year round sunshine is used up by existing shadows. Civic Center is one of the sunniest of the downtown parks. During most of the year the daily shadow distribution profile is that of a relatively flat "U" shape with greater shadows in the afternoon than in the morning. By Winter the "U" shape has flattened further by decreases in shadows early and late and increased shadows at mid-day.

Seasonal Shadow:

- Summer:** Sunny all day except in the late afternoon hours when an average of less than 40% of the park is in shade. Some shadows very early in the morning and very late in the afternoon. Almost no shadows from 9 AM to 4 PM. Approximately 5% in shadows during the Summer Solstice.
- Spring/Fall:** In general summer shadow conditions continue from the Spring and into the Fall. There are however less shadow impacts during the early morning hours and more shadows in the afternoon than occur during the Summer months. Approximately 5% in shadows during the Equinox.
- Winter:** Nearly 75% of the park remains in sun during the Winter months. In late afternoon hours there are increased shadow impacts on the open space. Approximately 10% in shadows during the Winter Solstice.

ADDITIONAL SHADOW

Absolute Limit:

Increase of up to 1.0% of total foot-hours for the park based on size of the park and the amount of existing shadow.

A maximum of 8,272,486.1 new shadow foot hours could be allowed.

Qualitative Criteria:

Preserve afternoon sun, particularly on seating areas and lawn areas.

Embarcadero Center 2

- LOCATION:** Embarcadero, Clay & Steuart
This open space is located at the Eastern edge of the Financial District.
- SIZE:** 149,698 square feet
The second largest Downtown park.
- CHARACTERISTICS:** This park is a plaza surrounded by large office buildings with many ground floor restaurants opening on to the space. The plaza contains a large fountain, open air cafes and is predominately paved. There is a flat grass area at the South end of the plaza. The space has excellent access from Market Street and South of Market Street. During lunch hour the park is heavily used by workers from the Financial District. Tourist use of the park is also heavy due to its location at the base of Market Street, proximity to the Ferry Building, California Street cable car line and the Hyatt Regency. Noon concerts, fashion shows and performances create a great deal of day use of the park.
- SUN AND SHADOW CONDITIONS:**

Yearly Shadow: This open space has significant sun resources during the morning hours. Afternoon shadows are heavy. The "J" shape to the shadow profile is consistent throughout the Spring, Fall and Summer due to the morning sun and the heavy afternoon shadows. The "J" shaped shade curve disappears in the Winter. In the Winter no more than 50% of the park is in the sun after the noon hour. The shape of the curve in Winter is represented by a shaft of sun in the morning and a nearly solid block of shadow in the post morning hours. Overall, 37.6% of the annual sun resource is currently in shadow.

Seasonal Shadow:

Summer: Between 8:30 am and noon there are almost no shadows in the plaza. Before 8:30 am nearly 40% of the space is in the shade. After the mid-morning sun the shadows gradually increase until 100% of the park is in shadow at the end of the day. 30% shaded during the Summer Solstice.

Spring/Fall: For two hours in the mid-morning there is 100% sun in the park. After 11:30 am the shadows increase such that mid-afternoon shadows are greater than in Summer but never reach the 100% shadows of late afternoon Summer days. 60% shaded during the Equinox.

Winter: During the Winter there is a brief two hour period where the park is in the sun. After 10 am shadows increase rapidly and by noon in mid-December 90% of the plaza is in the shade. 80% shaded during the Winter Solstice.

ADDITIONAL SHADOW

Absolute Limit: Increase of up to 0.1% of total foot-hours for the park based on size of park and amount of existing shadows. A maximum of 557,086.1 new shadow foot-hours could be allowed.

Qualitative Criteria: Avoid mid-day and Winter shadows.

SAN FRANCISCO
CITY PLANNING COMMISSION
RESOLUTION NO. 11595

JOINT RESOLUTION OF THE CITY PLANNING COMMISSION AND RECREATION AND PARK COMMISSION ADOPTING CRITERIA FOR DETERMINATIONS OF SIGNIFICANT SHADOWS IN FOURTEEN DOWNTOWN PARKS WHICH ARE SUBJECT TO BEING SHADOWED BY NEW DEVELOPMENT AND DECLARING THE INTENTION TO APPLY THESE CRITERIA REGARDING SHADOW IMPACTS PRIOR TO CONSIDERATION OF AN APPLICATION FOR A STRUCTURE THAT WOULD SHADOW A PROTECTED PROPERTY.

WHEREAS, The people of the City and County of San Francisco in June 1984 adopted an initiative ordinance, commonly known as Proposition K; and

WHEREAS, Proposition K requires that the City Planning Commission disapprove any building permit application authorizing the construction of any structure that will have any adverse impact on the use of property under the jurisdiction of the Recreation and Park Department because of the shading or shadowing that it will cause, unless it is determined that the impact would be insignificant; and

WHEREAS, Proposition K provides that the City Planning Commission and the Recreation and Park Commission shall adopt criteria for the implementation of that ordinance; and

WHEREAS, Proposition K can most effectively be implemented by analyzing properties in the City protected by that legislation which could be shadowed by new development, the current patterns of use of such properties, how such properties might be used in the future including considerations of possible future design and redevelopment of the property, and the various shadowing that could be created by various structures, including the amount of shadowing, the duration, and location; and

WHEREAS, The City Planning Commission and Recreation and Park Commission endorsed the submission by the Department of City Planning to the Mayor of a request for a supplemental appropriation in order to fund an analysis of properties that could be shadowed by new development (Resolution No. 13887); and

WHEREAS, A contract was awarded to the University of California at Berkeley's College of Environmental Design to develop a computerized system which could analyze existing shadow conditions on Proposition K properties and provide information to these Commissions necessary to establish rules or guidelines delineating the type of shadowing that can be determined to be significant or insignificant; and

WHEREAS, a computerized system of analysis was developed and used to analyze existing shadow conditions on fourteen downtown parks under the jurisdiction of the Recreation and Park Department; and

WHEREAS, The information developed by this computer analysis was then evaluated jointly by the staffs at the Department of City Planning and the Recreation and Park Department; and

WHEREAS, Recommendations for determinations of significant new shadows based on these staff evaluations were presented jointly to the Commissions in October and November of 1987; and

WHEREAS, A duly advertised public hearing was held on these recommendations; and

THEREFORE BE IT RESOLVED, That the criteria and the staff proposal for consideration by both Commissions presented in the memorandum to the Planning Commission and the Recreation and Park Commission dated February 3, 1989 regarding "Proposition K -- The Sunlight Ordinance" and describing criteria for determining significance be adopted as rules and guidelines for the determinations of significant shadows for the fourteen downtown parks analyzed.

I hereby certify that the foregoing Resolution was ADOPTED by the City Planning Commission on February 7, 1989.

Lori Yamauchi
Secretary

AYES	Commissioners Bierman, Dick, Engmann, Hu, Johnson, Morales and Tom
NOES	None
ABSENT	None
ADOPTED	February 7, 1989

AKG:181

DATE: May 24, 2012
TO: Planning Commission
Recreation and Parks Commission
FROM: Gabriel Metcalf
Brad Paul
RE: Park Shadow Task Force Closing Statement

At the request of Mayor Gavin Newsome and Board of Supervisors President David Chiu, the Planning Department facilitated the formation of a task force to review and analyze the manner in which projects casting shadow upon property under the jurisdiction of the Recreation and Park Department are reviewed by the Planning and Recreation and Parks Commissions. These projects, subject to Planning Code Section 295 (Proposition K), have been the subject of much public attention.

The Park Shadow Task Force was formed to include community based planning professionals, architecture and urban design professionals, representatives of the development community and technical experts. The Task Force received support from the Director of the Planning Department, Planning Department staff, the Director of the Recreation and Parks Department and Recreation and Parks Department staff, who provided background and technical information regarding the current methodology for analysis and implementation of Section 295.

The Task Force held five meetings between September 2010 and June 2012. During that time, the Task Force considered the original Proposition K implementation documents, the current methodology to determine shadow quantity and frequency, the number of properties shadowed by approved projects since the passage of Proposition K, and potential changes to the implementation process and approval of future projects casting shadow on applicable properties.

The Task Force found that since the passage of Proposition K in 1985 only 13 projects have been approved and constructed that increased shadow on Recreation and Parks Department property.

The Task Force found that technical changes to the current methodology for calculating the extent of cast shadow and its frequency would yield results that slightly differ from those derived from the current methodology. However, the Task Force also found that modifications to the methodology are better carried out at a future date and the Task Force anticipates technical changes to the methodology to be considered in a subsequent review of the implementation of Planning Code Section 295.

The Task Force found that some members are concerned about the potential for future cumulative addition of shadow upon open spaces in general (and in particular the open spaces potentially shaded by the future development in the Transit Center District Plan), and would like to establish definitive and

final limits of shadow upon specific open spaces. It found that others are concerned that new development be sited in locations amenable to walking and transit access, and are willing to tolerate some amount of new shadowing upon Recreation and Parks Department property

RECOMMENDATIONS

Given these findings and diverse points of view, the Task Force proposes that:

- The Planning Department maintain the current methodology for calculating the extent and frequency of cast shadow upon property under the jurisdiction of the Recreation and Parks Department; and
- Planning Department staff present to the Planning and Recreation and Park Commissions, as well as the Board of Supervisors the total maximum shadow cast upon property under the jurisdiction of the Recreation and Parks Department resulting from future development in the Transit Center District Plan area; and
- 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.