



Healthy Development and East SoMa

A Health Impact Study

Prepared by:

**DrPH in Action Team
School of Public Health
University of California, Berkeley**

**Caricia E.C.V. Catalani, MPH
Kim Coleman-Phox MPH
Terrence Q. Lo, MPH
David Tuller, MPH
Stephanie E. Weber, MPH**

May 2007

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Acknowledgments

This report is the product of a collaboration between the San Francisco Department of Health (SFDPH) and five first-year students from the Doctor of Public Health (DrPH) Program at the University of California, Berkeley. At SFDPH, the DrPH students would like to thank Lili Farhang and Megan Gaydos for the time, effort, and guidance they provided during this project collaboration. At the School of Public Health, the DrPH students would like to thank Ellie Schindelman and Claire Murphy for their support and encouragement throughout this project. Lastly, the DrPH team would like to give credit to Terry Lo and Caricia Catalani for the photos they contributed to the final presentation and report.

Executive Summary

East SoMa, part of the South of Market (SoMa) district, is divided into two parts. The larger, eastern half is bounded by the Embarcadero and 4th, Folsom, and Townsend Streets, and the western side by 5th, 7th, Mission and Harrison Streets. The neighborhood has a striking diversity of land uses, housing stock, and businesses within a relatively small geographic area. During the past ten years, East SoMa has undergone tremendous change in terms of population, economics, and land use.

Because the city had not developed an overarching plan for the area, many land use changes enacted during this period were the result of spot zoning. Spot zoning allows rezoning of a lot or parcel of land to permit a use that is not compatible with the surrounding area zoning and land use. New development in East SoMa occurred with little regard for how it might impact existing residents and businesses.

Increasingly, public health practitioners, urban planners, and neighborhood residents are recognizing the connections between the built environment and health. Zoning and land use help to determine where people can live within a neighborhood, their proximity to transit and employment, access to goods and services, exposure to environmental pollution, and access to green space for recreation and relaxation. By creating policies that permit higher density, mixed-use development closer to employment, zoning can enhance public safety, reduce motor-vehicle injuries, increase access to goods and services, encourage alternatives to auto use, reduce air pollution, and lessen the contribution to global warming. Together, urban design and land use regulation can accomplish two complementary goals: promote health and improve the neighborhood environment.

The ***Healthy Development Measurement Tool*** is a health impact assessment instrument developed by the San Francisco Department of Public Health in consultation with community members concerned about the effects of land use policies and development. The Tool is an evidence-based guide for decision-makers, land use planners, public agencies and community stakeholders to consider how to incorporate concerns about health into land use planning and policies.

Members of the DrPH team applied the Tool to health objectives under all elements, with the exception of community participation. In applying the Tool, they assessed each indicator and development target against what was mentioned or not mentioned in the East SoMA plan.

During the application of the HDMT, the DrPH team faced several limitations. Lack of familiarity with the SoMA community and the issues that the neighborhood faces presented the DrPH team with a learning challenge when attempting to apply the HDMT. Members of the DrPH team were also hampered by a lack of knowledge of land

use and urban planning. Another major challenge was scheduling meeting times with community groups, stakeholders, and project staff, since the five members of the DrPH team had different schedules.

Element analyses, findings, summaries, and recommendations are detailed in the report. The worksheet pages appended at the end of the report detail the analyses for each indicator. Additionally, minutes from the meetings with three stakeholders are included in this report.

In applying the Healthy Development Measurement Tool to the East SoMa plan, the DrPH team has found that the instrument provides a powerful and innovative way to analyze land use plans and policies. By allowing users to view city planning issues through the lens of public health, the Tool creates a unique opportunity for multiple stakeholders—city agencies, community-based groups, local residents, and others—to examine development proposals, identify strengths and weaknesses, and make recommendations for changes based on health-related data and metrics rather than whim or personal preferences.

The Tool also highlighted for the team the importance of paying close attention to the built environment, an emerging focus and concern of public health. By categorizing, quantifying and operationalizing many of the concepts that have become increasingly prominent in research on the health impacts of the built environment, the Tool can play an important role in translating these ideas from the pages of peer-reviewed journals into practical strategies that can influence events—and development plans—in the real world.

For the DrPH team, the project provided an excellent opportunity to learn and experience first-hand the utility of conducting health impact assessments. Given that this is a relatively new approach in public health, this project has helped team members reframe their views on why public health professionals need to be engaged with city planning and land use processes, and how they can influence these decisions in a constructive and cooperative manner. It has also broadened team members' understanding of how city agencies—even those, like public health and planning departments, that are sometimes in disagreement over priorities—can start to bridge the divide, work closely together, and seek common ground. The experience, therefore, will undoubtedly inform team members' future public health perspectives and approaches as they pursue their careers in the field.

In addition, the project has taught the DrPH students a great deal about working together as a team—identifying goals, coordinating tasks, communicating with each other and with clients, organizing and facilitating meetings, and seeking to resolve problems or conflicts as they arise. These skills, while not specifically focused on planning processes or healthy development, will nonetheless be invaluable to members of the team in future professional assignments.

Introduction

East SoMa

East SoMa, part of the South of Market (SoMa) area, is divided into two parts. The larger, eastern half is bounded by the Embarcadero and 4th, Folsom, and Townsend Streets, and the western side by 5th, 7th, Mission and Harrison Streets. The neighborhood has a striking diversity of land uses, housing stock, and businesses within a relatively small geographic area.



While specific data for East SoMa are not available, the overall SoMa area is a little over 2 square miles and has 21,099 residents. According to the 2000 US Census, the SoMa population is 47.2% white, 27.9% Asian/Pacific Islander, 13.5% African American, 10.5% Latino, 1% American Indian/Alaskan Native, and 10.4% multiracial or other race.(1) SoMa's plentiful jobs and cheap housing have made it attractive to new immigrants throughout its history. Filipinos were the last large influx of immigrants to arrive in SoMa beginning in the late 1960s, and Filipino-Americans continue to have a strong cultural influence in the area.(2)

Historically, SoMa was zoned for heavy industrial uses. Over the decades, the number of production, distribution, and repair (PDR) businesses has increased as much of the heavy industry has moved elsewhere. PDR businesses include printers, publishing houses, auto repair, warehouses, furniture designers, catering kitchens, event planners, and some manufacturers. The strong East SoMa presence of PDR businesses plays an important role in San Francisco's economy; these establishments represent a broad range of economic sectors and provide stable employment for workers with less formal education. Since less than 5% of land in the city of San Francisco is zoned for industrial use, PDR businesses in East SoMa who are displaced by competing development interests will likely be forced to relocate somewhere outside the city.(3)

In addition to numerous PDR and other types of businesses, East SoMa is home to or abuts several community organizations and cultural institutions, including historic St. Patrick's Church, West Bay Pilipino Multi-Services Center, SoMa Recreation Center, Bayanihan Community Center, Alice Community Garden, Yerba Buena Gardens and Moscone Center. Because of the proximity of the Transbay Bus Terminal, the 4th and King CalTrain station, the new T-Third line, the planned Central subway, and freeway

on- and off-ramps, East SoMa is accessible by multiple modes of transit. This accessibility also ensures that large volumes of fast-moving traffic flow along the streets of East Soma, resulting in high rates of collisions, pedestrian injuries, pollution and noise.

During the past ten years, East SoMa has undergone tremendous change in terms of population, economics, and land use. Between 1990 and 2000, the SoMa district experienced very high population growth, which drove up demand for housing in an already tight market. The dot-com boom of the mid- to late-1990's saw the emergence of the Multimedia Gulch around South Park and increased demand for office space. High demand from the influx of young, affluent dot-com employees also increased prices for existing housing, which resulted in fewer available units for lower- and moderate-income SoMa families. Currently, nearly 40% of East SoMa households can be described as "financially burdened," a term used when a family's housing costs equal or exceed 30% of its household income.

Existing zoning in East SoMa provided an ideal environment for the growth of multimedia and Internet-related businesses. Land in East SoMA zoned for industry was less expensive than in other areas of San Francisco, and building standards and planning requirements for industrially zoned land were less restrictive (2). The increased demand for housing led to the construction of numerous live/work spaces designed mainly for families without children as well as market-rate and higher-end residential units.(4)

The dot-com boom brought new investment in commercial real estate development in SoMa, but the increased demand for land and office space displaced many existing PDR businesses. Office vacancy rates in San Francisco, which hovered around 14% between 1987-1993, declined to 5% in 1997 and 2% from 1999-2000.(5). While the dot-com wave added new jobs for residents with higher levels of education, many traditional blue-collar jobs, which tend to provide steady work for people with less formal education, were eliminated or displaced. Since 1998, SoMa has experienced a net loss of 16% of its PDR businesses.(2)

Because the city had not developed an overarching plan for the area, many land use changes enacted during this period were the result of spot zoning. Spot zoning allows rezoning of a lot or parcel of land to permit a use that is not compatible with the surrounding area zoning and land use.(6) For example, many industrial properties were rezoned for market-rate and mixed use residential development. New development in East SoMa occurred with little regard for how it might impact existing residents and businesses.(7)

In response to the residential and job displacement, neighborhood gentrification, and infrastructure burdens that were occurring because of development in East SoMa, community organizations successfully pressured the city to launch a comprehensive planning process that would establish zoning controls in support of neighborhood goals and residents' needs. Beginning in February 2002, diverse stakeholders participated in

a series of workshops conducted by the San Francisco Department of City Planning to identify goals for their neighborhood and discuss how new zoning could promote these goals.

However, participating stakeholders were concerned that the rezoning process did not adequately address their concerns about the health (i.e., displacement, stress, noise) and socioeconomic (jobs, housing, infrastructure) impacts of rezoning. In 2003, community stakeholders approached the San Francisco Department of Public Health to conduct a health impact assessment to formally articulate the social and health impacts of the rezoning and area plans.(7)

Increasingly, public health practitioners, urban planners, and neighborhood residents are recognizing the connections between the built environment and health. Zoning and land use help to determine where people can live within a neighborhood, their proximity to transit and employment, access to goods and services, exposure to environmental pollution, and access to green space for recreation and relaxation. By creating policies that permit higher density, mixed-use development closer to employment, zoning can enhance public safety, reduce motor-vehicle injuries, increase access to goods and services, encourage alternatives to auto use, reduce air pollution, and lessen the contribution to global warming. Together, urban design and land use regulation can accomplish two complementary goals: promote health and improve the neighborhood environment.(7)

Methodology

Tool Introduction

The *Healthy Development Measurement Tool* is a health impact assessment instrument developed by the San Francisco Department of Public Health in consultation with community members concerned about the effects of land use policies and development. The Tool is an evidence-based guide for decision-makers, land use planners, public agencies and community stakeholders to consider how to incorporate concerns about health into land use planning and policies. Results obtained from applying the Tool can help to influence land use decisions in order to move towards a neighborhood environment that advances health rather than harm it.

Tool Application

Members of the DrPH team applied the tool to health objectives under all elements, with the exception of community participation. In applying the tool, they assessed each indicator and development target against what was mentioned or not mentioned in the East SoMA plan. For each indicator and development target assessed, the following steps, as described on the Healthy Development Measurement Tool website:

- Step A. List Community Health Indicator and Development Target
- Step B. Record and Assess Community Health Indicator Data from the HDMT website (http://thehdm.net/use_tool.php)
- Step C. State Plan/Project Facts
- Step D. Evaluate Plan/Project on Community Health Indicator and Development Target
- Step E. Identify Potential Plan/Project Improvements
- Step F. Summarize Findings
- Step G. Recommend Changes to the HDMT

Resources to conduct analyses

The following resources were utilized for the analyses-

- Healthy Development Measurement Tool (http://thehdm.org/use_tool.php)- accessed between Jan and April 2007
- East SoMA Area Plan, SF Planning Department, February, 2007
- HDMT worksheets
- Meetings with stakeholders and community groups (detailed in a subsequent section)
- Site visit tour through the SoMA neighborhood

Limitations/Challenges

During the application of the HDMT, the DrPH team faced several limitations. Lack of familiarity with the SoMA community and the issues that the neighborhood faces presented the DrPH team with a learning challenge when attempting to apply the HDMT. Members of the DrPH team were also hampered by a lack of knowledge of land use and urban planning. As a result, applying the Tool consumed a lot more time than team members had anticipated. Originally, team members selected 25 indicators each; midway through, the number was reduced to about ten indicators each. Another major challenge was scheduling meeting times with community groups, stakeholders, and project staff, since the five members of the DrPH team all had different schedules. Many meetings were not attended by all five.

Element A: Environmental Stewardship

Objective ES 1/Indicators a-b-c: Decrease consumption of energy and natural resources

Decreasing consumption of energy and natural resources should clearly be a critical component of any new development. The HDMT targets call for between 25% and 90% of a project's energy demands to be met through use of products rated by the EPA's Energy Star system. With increased business and residential development anticipated by the East SoMa plan, energy demand is likely to increase. However, older buildings are generally less energy-efficient than newer ones incorporating more advanced technologies and designs. Therefore, as the balance between newer and older buildings changes, greater energy-efficiency could help reduce the per capita amounts used even if total energy consumption rises.

The East SoMa Plan does not provide any information that would allow a determination as to whether the development targets will be met. The plan addresses energy efficiency of buildings only in Policy 5.4.4, which calls for "promoting use of renewable energy, energy-efficient building envelopes, passive heating and cooling, and sustainable materials" and for "compliance with Leadership in Environmental Design (LEED) certification standards and/or other evolving environmental efficiency standards." However, this policy is advisory rather than mandatory.

Recommendations

- 1) The plan should include mandatory energy-efficiency requirements rather than advisory ones
- 2) The plan should include targets for EPA Energy Star products as well as LEED certification standards
- 3) The Tool should combine the three energy-use indicators into a single indicator

Objective ES 2/Indicators b-c: Restore, preserve and protect healthy natural habitats

Indicator ES 2.b is irrelevant to East SoMa, as the neighborhood does not contain any parks or open spaces with natural areas as understood by the Tool. Moreover, it is unlikely to ever contain such areas, since the natural habitats that undoubtedly once characterized the area have long since given way to development. Although there is no data at the neighborhood level, the supervisorial district that includes SoMa as well as Civic Center and Rincon Hill has the worst ratio of open space to resident in the city, with 0.64 acres/1000 people compared with 7.4/1000 for the city as a whole.

The East SoMa Plan recognizes that “East SoMa has a deficiency of open spaces serving the community” and warns that “this deficiency will only be exacerbated” with expanding housing and development. Section 3, on open spaces, promotes the creation not only of standard open space options but also “non-traditional open spaces such as pocket parks on widened sidewalks or shared alleyways.” However, the policies in this section of the plan appear to be advisory rather than mandated, including the suggestion that developers who opt not to create open space should pay “an in-lieu fee that actually captures some of the cost of developing off-site open space.” Policy 3.1.2 does call for the city to “require new development to provide or contribute” to open space development but contains no specifics, which severely undermines the force of the requirement.

In short, the plan is not designed to reach the maximum development target of 10 acres/1000 residents. Nor can it be expected to reach that goal, given the high-density character of the East SoMa urban landscape. However, the plan also does not appear to require that developers fulfill either the minimum or the benchmark development targets of incorporating open space at a 1:1 or 1.5:1 ratio.

Recommendations

- 1) The Plan should include mandatory open-space requirements rather than advisory ones
- 2) The Plan should set in-lieu fees at a level high enough to enable the city to develop additional open space
- 3) For the Tool, the park data should be broken down beyond the supervisorial district level into different neighborhoods and sub-neighborhoods, if possible.

Objective ES 3/Indicators a-b-c-d-e: Promote food access and sustainable rural and urban agriculture

All of these except ES3.a have no development targets, and the only development target for the first is that every new development should provide a community-supported agriculture drop-off point. A greater proportion of households in SoMa are within 1/2 – mile of a farmers’ market and a CSA drop-off site than in the rest of the city, although a lower proportion are within 1/4 mile of a community garden. The East SoMa Plan makes no mention whatsoever of farmers’ markets, community gardens, or CSA drop-off points, so what impact they will have on this indicator is unclear. Certainly, the current plan is unlikely to increase the proportions of residents who have access to these facilities, unless most of the residential development takes place in sections of East SoMa close to such amenities.

Recommendations

- 1) Create development targets for indicators b, d, and e

- 2) Include references to community gardens, farmers' markets and CSA drop-off points in the plan, to alert developers and the community that such amenities are of interest
- 3) ES.3.c is not a relevant indicator to San Francisco, since 100% of farmers' markets are within ½-mile of public transportation. It is also unclear whether the indicator is referring to the proportion of farmers' markets within a neighborhood that is close to public transportation or in the city overall; if the latter, then it's not really an indicator that should be included here, since it is not a local-level metric.

Objective ES.5/Indicators a-b-c: Preserve clean air quality

This is an important objective for East SoMa, since SoMa is essentially a huge on-off ramp for the bridge and freeway system and is also criss-crossed by major roads and trucking routes. Therefore, unlike many parts of the city, most of the neighborhood is within 500 feet of major sources of air pollution, rendering the benchmark target—that sensitive sites should not be located within that range—impossible to meet. The minimum target is that appropriate heating, ventilation and air conditioning (HVAC) and filtration systems should be used in buildings within 500 feet of air pollution sources.

Because the East SoMa plan envisions significant development, the number of people exposed to air pollution from the cars and trucks is likely to increase, although improvements in mass transit could offset that to some degree. Nothing in the plan directly addresses this objective and these indicators. The plan encourages the use of energy-efficient materials and technologies, but it does not mandate such use and certainly makes no specific references to HVAC and filtration systems. The Tool itself also does not recommend any particular HVAC and filtration system specifications.

Recommendations

- 1) The Tool should clarify whether the requirement for HVAC and filtration systems applies to all buildings or just residential ones (presumably all, but the indicator asks about proportion of households are within 500 feet, suggesting that perhaps the target was meant to be limited to residential buildings)
- 2) The plan should include some specific reference to specifications for HVAC and filtration systems, or at least reference the CARB standards

A. Environmental Stewardship (ES)		SoMA data	SF data	Met development target?
Objective ES.1 Decrease consumption of energy and natural resources				
ES.1.a	Residential per capita natural gas use	14.94 thm	221.21 thm	Not clear--probably not
ES.1.b	Commercial natural gas use by industry type			
ES.1.c	Total residential electricity use (kWH) per capita	1644.48 kWH	1487.16 kWH	Not clear--probably not
ES.1.d	Electricity use by industry type	not available	57.2% of electricity for industrial/commercial purposes	Not clear--probably not
ES.1.e	Gross per capita water use			
ES.1.f	Annual per capita waste disposal			
ES.1.g	Total kilowatt hours of renewable energy/electricity produced in SF			
Objective ES.2 Restore, preserve and protect healthy natural habitats				
ES.2.a	Miles of publicly accessible shoreline			
ES.2.b	Acres of significant natural areas to total park acreage	None in SoMa	1105 acres of significant natural areas in 2722 acres of parkland	Not relevant to SoMa
ES.2.c	Acres of publicly accessible open space per capita	0.64 acres/1000 residents (also includes Civic Center and Rincon Hill)	7.4 acres per 1000 residents	Probably not--no mandates
ES.2.d	Proportion of public schools with a school garden			
ES.2.e	Proportion of tree canopy coverage			
ES.2.f	Street tree population			
ES.2.g	Proportion of pervious ground surfaces			
ES.2.h	Proportion of buildings with green roofs			
Objective ES.3 Promote food access and sustainable urban and rural agriculture				
ES.3.a	Proportion of households with 1/2-mile access to a community-supported agriculture (CSA) drop-off site	51.60%	38.50%	No mandate in plan for CSA drop-off points in new development
ES.3.b	Proportion of households with 1/2-mile access to a farmer's market	39.30%	25.20%	No identified target
ES.3.c	Proportion of farmers' markets with 1/2 mile access to public transportation	Not relevant--no farmers' markets in SoMa	100%	No identified target
ES.3.d	Location of farmers' markets with EBT card acceptance relative to food stamp recipients	There is no household or citywide proportion data with this indicator	There is no household or citywide proportion data with this indicator	No identified target
ES.3.e	Proportion of households with 1/4 mile access to a community garden	21%	30.60%	No identified target
ES.3.f	Location of farmers' markets with EBT card acceptance relative to food stamp recipients			

ES.3.g	Proportion of households with 1/4 mile access to a community garden			
ES.3.h	Commercial availability of composting and recycling pick up services			
ES.3.i	Residential availability of composting and recycling pick up services			
	Acres of unutilized contaminated sites and Brownfields			
	Number of environmental compliance actions taken against local jurisdiction businesses resulting in fine or penalty			
Objective ES.5 Preserve clean air quality				
ES.5.a	Proportion of households living within 500 feet of busy roadways	75.60%	51%	Not clear--no specifications for HVAC systems in Tool or Plan
ES.5.b	Proportion of households living within 500 feet of stationary source air pollution	12%	2.30%	Not clear--no specifications for HVAC systems in Tool or Plan
ES.5.c	Proportion of households living within 500 feet of designated truck routes	93.50%	38.90%	Not clear--no specifications for HVAC systems in Tool or Plan

Element B: Sustainable and Safe Transportation

The Healthy Development Measurement Tool (HDMT) includes several objectives that emphasize the importance of incorporating sustainable and safe transportation into area development plans. Sustainable and safe transportation is a serious public health issue for many reasons, including the following highlighted by the HDMT :

- Vehicle miles traveled are directly proportional to air pollution and greenhouse gas emissions .
- Exposure to air pollution contributes to the development of cardiovascular diseases, heart disease, and stroke .
- Areas with high levels of vehicle miles traveled per capita also tend to have higher accident and injury rates .
- Walking or biking to work helps people meet minimum requirements for physical activity. Health benefits of physical activity include a reduced risk of premature mortality and reduced risks of coronary heart disease, hypertension, colon cancer, and diabetes mellitus .
- A high quality pedestrian environment can support walking both for utilitarian purposes and for pleasure .

According to the Tool, sustainable transportation can be assessed according to three main objectives: 1) decrease private motor vehicle trips and miles traveled; 2) provide affordable, safe, and sustainable public transportation options; and 3) [Increase traffic safety and non-motorized forms of transport](#). At the time of analysis, the third objective was not yet incorporated in this section of the HDMT; consequently, there are no findings to present on this objective.

Objective ST. 1: Decrease private motor vehicle trips and miles traveled

The analysis of the indicators of this objective suggested that, for the most part, the East SoMa Area Plan is likely to decrease private motor vehicle trips and miles traveled. More specifically, the Plan is likely to decrease vehicle miles traveled per East SoMa resident; decrease average daily vehicle miles traveled per weekday; decrease vehicle trips per resident; and increase the proportion of commute trips made by public transit. However, the Plan falls short of achieving development targets concerning the ratio of miles of bicycle lanes and paths to miles of road and the total transportation expense relative to median income. Additionally, at the time of analysis, there was not sufficient data to determine the Plan's potential impact on the area score on Pedestrian Environmental Quality Index and the proportion of households owning a car.

Several of the Area Plan's main objectives and policies are dedicated to decreasing private motor vehicle trips and miles traveled. These objectives include goals to:

- "Improve public transit" (Obj 4.1);
- "Establish parking policies that improve the quality of neighborhoods and reduce traffic congestion by encouraging travel by public transit or other non-auto transportation methods" (Obj 4.2);
- "Promote and improve infrastructure for bicycling and walking as important

- modes of transportation” (Obj 4.5); and
- “Encourage alternatives to car ownership” (Obj 4.6).

The Objectives and Policies regarding transport often use decisive language, such as “prohibit” (Policy 4.2.6) or “eliminate” (Policy 4.2.1), and include specifying details such as “In accordance with Section 8A.113 of Proposition E (2000), new parking facilities can only be constructed if local excess parking demand is so high that motorists are willing to pay prevailing downtown rates for parking.” (Policy 4.2.5).

In addition to objectives directly related to transportation, the Plan will also decrease private motor vehicle trips and miles traveled by locating the destinations that supply residents’ daily needs within East SoMa. Examples of daily needs are employment, schools, recreation, health care and other human services, and groceries. The Community Facilities section of the Area Plan addresses some of these daily needs, like “essential neighborhood-serving community and human services activities” (Policy 5.1.1), “community recreation, arts and educational facilities” (Policy 5.1.2), “new middle school” (Policy 5.1.4), and, “childcare services” (Policy 5.1.5). The language in this section of the plan is less forceful, with policies often including terms such as “encourage” and “consider.” The policies also tend not to include details specifying how they should be implemented or acted upon.

Although the Plan includes many provisions that have some bearing on the HDMT objective of decreasing private motor vehicle trips and miles traveled, there are three areas for improvement. First, the Plan neglects to mention a few basic factors in addressing transportation issues. For example, the Plan neglects one of the most central transportation needs: the commute to work. The distance of resident’s daily commute is one of the largest contributing factors to miles traveled per resident, per day. Without increasing the availability within the East SoMa neighborhood, residents’ will need to continue to commute outside of the neighborhood to get to work. Accordingly, the daily commute to work will continue to raise the number of miles traveled in both public and private vehicles. Second, the Plan does not include any objectives or policies that encourage the subsidization of public transit passes for low-income residents. That suggests that access to transit may only be improved for those middle- and upper-income residents who can afford it. Third, despite the Area Plan’s support for bicycle transit, the citywide effort to build a system of linked bicycle paths and lanes has been halted by a legal case currently underway in the Superior Court of San Francisco.

Objective ST.2: Provide affordable, safe, and sustainable public transportation options

In general, the analysis found that the development targets regarding affordable, safe, and sustainable public transport options are being met in the East SoMa neighborhood. According to the analysis of the indicators, 100% of residents are already within 1/4 mile of a local bus or rail link and 97% are already within 1/2 mile of regional, rail, or ferry link. There was not sufficient data to determine the Plan’s potential impact on the area score of the Environmental Quality Index.

Although geographical access to transit links is already quite high in East SoMa, the Plan intends to extend area links. Objective 4.1 plans to “Improve public transit” and, to do so, lays out the following policies: “Improve and expand public transit linking East SoMa to the rest of the city” (Policy 4.1.1); “Place a stop on 4th Street” if the Central Subway is built (Policy 4.1.2); “Improve service, reliability, and overall quality of transit rider’s experience” (Policy 4.1.3); and, “ Support the proposed E-line Historic streetcar line” (Policy 4.1.4). The Plan uses very explicit language in describing these developments, often stating exactly where new transit lines are needed and where waiting areas should be located.

However, access means more than geographical proximity and includes issues such as cost, perceived and actual safety, weather, traffic patterns, hours of operation, speed and timeliness of trips, and the relative ease of public transit as compared to private vehicle transportation. Although Policy 4.1.3 “support[s]” improvements in some of these areas, it makes no specific mandates or recommendations.

Element B. Sustainable Transportation (ST)		SoMA data	SF data	Met development target?
Objective ST.1 Decrease private motor vehicle trips and miles traveled				
ST.1.a	Vehicle miles traveled per San Francisco resident (SF resident only)	n/a	8.8	min
ST.1.b	Average weekday daily vehicle miles traveled	n/a	8 million	min
ST.1.c	Vehicle trips per resident	n/a	1.32	bmK
ST.1.d	Proportion of commute trips made by walking or other means	40.%	14.%	min
ST.1.e	Proportion of commute trips made by public transit	26.%	33.%	min
ST.1.f	Ratio of miles of bicycle lanes and paths to miles of road	n/a	7 : 100	no
ST.1.g	Total transport expense relative to median income	n/a	\$0.12 : \$1	no
ST.1.h	Area score on Pedestrian Environmental Quality Index	n/a	n/a	insufficient data
ST.1.i	Proportion of households owning a car	n/a	n/a	insufficient data
Objective ST.2 Provide affordable, safe, and sustainable public transportation options				
ST.2.a	Proportion of households with 1/4 mile access to local bus or rail link	100.%	100.%	yes
ST.2.b	Proportion of households with 1/2 mile access to regional bus, rail or ferry link	97.%	22.%	yes
ST.2.c	Area score on the Pedestrian Environmental Quality Index	n/a	n/a	insufficient data

Recommendations for Safe and Sustainable Transportation

To meet the objectives of (a) decreasing private motor vehicle trips and miles traveled and (b) providing affordable, safe, and sustainable public transportation options, we recommend that the Plan adopt policies to support the following:

- Improve access to a range of employment opportunities for East SoMa residents.
- Make public transit affordable for low-income residents.
- Propose advocacy strategies for removing the injunction against building infrastructural improvements for bicycle paths and lanes in East SoMa. (However, this may not be within the purview of the Area Plan)
- Improve perceived and actual safety at transit waiting areas.
- Construct covered and weatherized transit waiting areas.
- Increase speed and timeliness of public transit trips.
- Impede the ease of private vehicle travel through East SoMa.

Element C. Public Safety

Objective PS.1 Increase traffic safety for all users

- PS.1.a Number of pedestrian injuries
- PS.1.b Number of pedestrian fatalities
- PS.1.c Vehicle collision rate per 1000 population
- PS.1.d Bicycle collision rate per 1000 population

Given that San Francisco is a major tourist destination and commercial center, traffic volume, rates of pedestrian injuries and fatalities, vehicle collisions, and bicycle collisions are high. Approximately 11% (n=444) of the nearly 4000 pedestrian injuries that occurred in San Francisco during 2001-2005, took place in the SoMa neighborhood. Of the 89 citywide pedestrian fatalities that occurred during the same period, approximately 5.6% (n=5) occurred in SoMa. While this rate is lower than the proportion of pedestrian fatalities in other densely populated neighborhoods such as Downtown/Civic Center (n=11) or the Mission (n=10), it is still more than double the city average.

Moreover, 11.4% (2,781) of the 24,502 motor vehicle collisions occurring in San Francisco from 2001-2005 took place in the SoMa area—more than in any other neighborhood in the city. Similarly SoMa had the highest number of bicycle collisions (274 of a total of 1499) of any San Francisco neighborhood. There are no specific data for East SoMa, but the area includes freeway on and off ramps “designed to facilitate high traffic speeds, multiple lanes of turning traffic, and wide turning radii compromising the *safety*, convenience, and enjoyment of pedestrians” (East SoMa Area plan, p. 30). Additionally, the street grid in the neighborhood creates blocks which are twice the standard block length of blocks in other parts of the city but lack mid-block crosswalks, a factor that encourages jay-walking.

The Plan recognizes the unsafe pedestrian environment in SoMa, and several objectives and policies support improving the infrastructure for multiple modes of transportation, including walking and bicycling (Objective 4.5, Policies 4.5.3-4.5.6, pp. 29-30; Objective 4.7, Policies 4.7.1-4.7.4, pp. 31-32). However, only Policies 4.5.3 and 4.5.4 include actions for implementing measures to increase pedestrian safety by requiring that large-scale projects incorporate alleys and recommending that the City prohibit the sale of existing streets and alleys. Alleys improve access to buildings, provide short-cuts for pedestrians and cyclists, and can serve as alternative source of open space. The plan also identifies the areas near freeway on- and off-ramps as particularly hazardous for pedestrians but does not prioritize addressing the situation at any particular intersection or corner, nor does it specify interventions that should be attempted. With the exception of the recommendation to include bulb-outs as a traffic-calming device on Howard Street (Policy 4.7.2, p. 31), the Plan has no objective or

policy that recommends or suggests installation of design and engineering strategies that have been shown empirically to reduce motor vehicle crashes. The plan states the city “should consider” making improvements to designated bicycle routes but does not include specific proposals (Policy 4.5.1, p. 29).

Currently, none of the development targets are met. If the city actually implements all the Plan’s recommendations rather than reviewing them as advisory, the proposed actions would likely improve pedestrian safety in the SoMa neighborhood. However, the plan itself includes little guidance on implementation.

Objective PS.2 Increase accessibility, beauty and cleanliness of public spaces

PS.2.h Street tree population

Street trees comprise 16% of San Francisco’s urban forest. SoMa, Rincon Hill, and Civic Center contain 10.3% of San Francisco’s street trees and have approximately 136.9 trees per square mile and 6.4 trees per resident compared to the city wide average of 112.8 trees per square mile and 7 trees per resident. There are no data specific to East SoMa. While the larger area’s number of trees per square mile is higher than the city average, East SoMa appears to suffer from a shortage of trees in maps of the city’s street tree population. In addition to decreasing the urban heat-island effect, reducing storm water runoff, and improving air quality, street trees help to muffle traffic noise. Given the presence of freeway on- and off-ramps, the large volume of traffic passing through the area, and the noise and pollution generated by some PDR businesses, East SoMa may need a much higher concentration of street trees compared to other neighborhoods in the City.

The Plan recommends the use of street trees to “enhance the pedestrian environment” (Policy 3.3.2, p. 23) and recommends making Folsom Street into a green connector street (Policy 3.2.2, p. 22). Another policy (3.2.3, p. 22), while not explicitly mentioning street trees, states that “The City has also begun to consider greening and improving walkability for 2nd and 7th Streets” (p. 22). Only one policy specifies planting street trees (Policy 3.3.2) but it is merely a recommendation, not a requirement. Since the Plan does not include any requirements for the placement, density, or size of street trees, it is likely to have little if any effect on the number of street trees in East SoMa.

Objective PS.3 Maintain safe levels of community noise

PS.3.a Daytime and nighttime outdoor noise levels

According to the Environmental Protection Agency, people can be exposed to an average of 70 decibels of noise during a 24-hour period without sustaining any measurable noise-related hearing loss. Levels of 55 decibels outdoors and 45 decibels indoors permit spoken conversation and other activities such as sleeping, working and recreation with minimal interference and annoyance. SoMa has the highest average daytime and nighttime decibel levels of any neighborhood in the city. The average level of day/night noise (LDN) in SoMa is 68 decibels compared to an average of 62 for the whole city. There is no noise data specifically for East SoMa; however, the traffic noise

map indicates that areas adjacent to freeways have especially high levels of noise (≥ 70 decibels). These levels place SoMA close to the upper limit of safety under the EPA framework.

The Plan includes one policy and one implementing action that could reduce outdoor noise levels by calming traffic (Policy 4.7.2, p. 31). However, the policy is a recommendation and contains no requirements for implementation. It is not clear if the development target is met. The Plan will have no guaranteed impact on outdoor noise levels in East SoMa.

Objective PS.4 Promote safe neighborhoods free of crime and violence

PS.4.a Density of take-out alcohol outlets

PS.4.b Alcohol-related pedestrian injuries

SoMa has 13.7 take-out alcohol outlets per square mile compared to the city wide proportion of 18 outlets per square mile. However, SoMa has a higher number of outlets per capita; 1:728 persons compared to 1:930 persons citywide. Additionally, SoMa is adjacent to Downtown/Civic Center, which has one of the highest proportions of take-out alcohol outlets in the city (128 outlets/square miles). Data on take-out alcohol outlets in East SoMa are not available. SoMa has one of the highest rates of pedestrian injury of any San Francisco neighborhood. Neighborhood data for East SoMa are not available; however, a map of alcohol-related pedestrian injury shows these injuries are clustered along Folsom, 5th, and especially 6th Streets.

The development target for the density of take-out alcohol outlets (indicator PS.4.a) is that new development does not allow retail alcohol sales where area density of alcohol outlets is greater than 2 times the citywide density. Presently the density of take-out alcohol outlets in SoMa is significantly less than twice the citywide density, so the development target doesn't apply. However, if there is no city policy, regulation or ordinance to enforce this restriction, new alcohol outlets could open in SoMa and surpass twice the citywide density. Neighborhood-level data for alcohol-related pedestrian injuries in East SoMa (indicator PS.4.b) is not available.

The Plan does not contain any objectives, policies or implementing actions associated with density of take-out alcohol outlets or alcohol-related pedestrian injuries and is unlikely to impact these indicators.

Element C. Public Safety (PS)		SoMA data	SF data	Met development target?
Objective PS.1 Increase traffic safety for all users				
PS.1.a	Number of pedestrian injuries	444	3994	insufficient data
PS.1.b	Number of pedestrian fatalities	5	89	insufficient data
PS.1.c	Vehicle collision rate per 1000 population	2781	24502	insufficient data
PS.1.d	Bicycle collision rate per 1000 population	274	1499	< min
PS.1.e	Area score on Pedestrian Environmental Quality Index	n/a	n/a	insufficient data
PS.1.f	Proportion of residential streets with 20 mph speed limit	n/a	n/a	insufficient data
Objective PS.2 Increase accessibility, beauty and cleanliness of public spaces				
PS.2.a	Proportion of sidewalk lengths with pedestrian scale lighting			
PS.2.b	Ratio of public toilets to area of retail space in neighborhood business districts			
PS.2.c	Ratio of public litter receptacles to area of retail space in neighborhood business districts			
PS.2.d	No measurable indicator identified [Concept to measure: Public plazas and parks exposed to high wind levels from buildings]			
PS.2.e	No measurable indicator identified [Concept to measure: Public plaza or parks exposed to shadow from buildings]			
PS.2.f	Proportion of public schools with a school garden			
PS.2.g	Proportion of tree canopy coverage			
PS.2.h	Street tree population	n/a	n/a	n/a
PS.2.i	Proportion of pervious ground surface			
Objective PS.3 Maintain safe levels of community noise				
PS.3.a	Daytime and nighttime outdoor noise levels	68 dBA	62 dBA	insufficient data
Objective PS.4 Promote safe neighborhoods free of crime and violence				
PS.4.a	Density of take-out alcohol outlets	13.7/sq .mile	18/ sq. mile	meets
PS.4.b	Alcohol-related pedestrian injuries	n/a	n/a	insufficient data
PS.4.c	Location of police stations			
PS.4.d	Number of police officers per capita			
PS.4.e	Location of fire stations			
PS.4.f	Proportion of sidewalk lengths with pedestrian scale lighting			
PS.4.g	Number of physical assaults			
PS.4.h	Number of homicides			
PS.4.i	Number of rapes and sexual assaults			

Element D: Public Infrastructure/Access to Goods and Services (PI)

Objective PI.1 Assure affordable and high quality child care for all neighborhoods

The data indicate that affordable and high quality childcare is of high concern for SoMA families. There is a substantial need based on the number and capacity of childcare facilities, childcare subsidies available, and the percentage of the household budget devoted to childcare. Data pertaining to the quality of childcare facilities were not available, but anecdotal evidence suggests that childcare staff turnover has affected the quality of childcare.

The East SoMa plan does little to address this objective. Only Policy 5.1.5 “Ensure childcare services are located to serve neighborhood workers and residents” is relevant to childcare, and it solely addresses the issue of geographic access of childcare to SoMA residents. Geographic access to childcare services, in addition, does not ensure that the childcare is either affordable and of high quality. The sub-area plan needs to include more comprehensive policies to address the childcare needs of SoMA residents. Overall, there are either no development targets or too little data to make a determination if the targets will be met.

Objective PI.2 Assure accessible and high quality educational facilities

The influx of new residential development in SoMA is likely to place increased burdens on educational facilities. Population estimates on which to base educational facility needs may be inaccurate. Currently, the sole public school within SoMA is an elementary school. However, due to policies of the San Francisco Unified School District, SoMA residents also attend other schools throughout the city. Based on the current data, there appears to be demand for more public schools, in particular a middle school, to be built within the SoMA area. Geographic accessibility of schools also appears to be a challenge for SoMA students. Data on school quality has focused on academic performance and the proportion of graduating high school seniors, both of which are difficult to extrapolate to SoMA students only due to SFUSD enrollment policies.

The sub-area plan does little to address this objective. While Policy 5.1.4 “Consider the establishment of a new middle school in East SoMa” is written in the Area Plan, no such policies exist for elementary schools or high schools. The focus of many of the indicators and development targets, however, is on elementary schools or high schools. Policies in the sub-area plan do address transportation issues for SoMA residents. Improving transportation connections would also improve commute times for students. Several indicators had development targets that were not related to one another. For example, the development targets for indicators PI. B-D were based on community service and were unrelated to the indicators.

Objective PI.3 Increase park, open space, and recreation facilities

The data suggest that SoMA residents nearly have adequate geographic access to parks. The parks were also adequately maintained, according to the park evaluation scores. SoMA residents, however, have lower geographic access to recreational facilities than residents of San Francisco overall. The development of new recreational facilities may therefore be a need for SoMA. Although data on per capita public recreational and park funding is available, a determination if the funding is sufficient to maintain facilities is not possible with the limited data provided.

Policies 3.1.1-4, 3.2.1-3, 3.3.1-2, 3.4.2, 3.4.5, 5.1.1-2, 5.1.6 all adequately support meeting at least the minimum development targets. Furthermore, these policies also promote the concept of alternative open space in a densely urban environment and the establishment of a transportation corridor to connect open spaces. The sub-area plan also sufficiently addresses the need to maintain and renovate parks and recreational facilities to best suit the needs of SoMA residents.

Objective PI.5 Assure affordable and high quality public health facilities

There is currently only one development target for this objective, which is related to Indicator PI.5.k – “New hospitals and major clinical care facilities are sited within ½ mile of a regional transit stop or should provide free public shuttle service from regional transit services such as BART.” This development target is thus only relevant to new healthcare facilities. At the current time, no new health facilities are being proposed in the East SoMa subarea plan, thus the plan cannot be evaluated on this specific development target, though it may generally be evaluated in relation to the community health assessment.

Element D. Public Infrastructure/Access to Goods and Services (PI)		SoMA data	SF data	Met development target?
Objective PI.1 Assure affordable and high quality child care for all neighborhoods				
PI.1.a	Difference between number of children eligible for childcare and number of childcare subsidies available	1110	22337	no target
PI.1.b	Number of children 0-13 years and capacity of licensed child care (centers and family homes)	2017/515	88037/16889	min
PI.1.c	Proportion of licensed childcare facilities achieving environment quality rating scale of 5 or better disaggregated by facility type	n/a	n/a	insufficient data
PI.1.d	Childcare as a percentage of family budget	26.5%	16.4%	no target
Objective PI.2 Assure accessible and high quality educational facilities				
PI.2.a	Proportion of residential units with 1/2 mile access to public elementary school	48.%	88.%	no
PI.2.b	Ratio of public school population to citywide school-aged population	n/a	see HDMT	no
PI.2.c	Proportion of schools achieving an academic performance indicator base of 800 or more	0.%	25.2%	no
PI.2.d	Proportion of students graduating from high school by school	n/a	94.%	no
PI.2.e	Proportion of children with 30 minute public transit access to public middle school and/or high school	n/a	n/a	min
PI.2.f	Number of public schools with onsite kitchen facilities	n/a	77.1%	no
PI.2.g	Proportion of public schools with a school garden	0	30.2%	insufficient data
Objective PI.3 Increase park, open space and recreation facilities				
PI.3.a	Proportion of population with 1/4 mile access of neighborhood or regional park	68.%	76.%	min
PI.3.b	Proportion of population with 1/4 mile of a recreational facility	30.%	46.%	min
PI.3.c	Proportion of public parks receiving a park evaluation score of 95% or more	0	19.2%	baseline
PI.3.d	Per capita public recreational and park funding	n/a	\$171.53	min
Objective PI.4 Assure spaces for libraries, performing arts, theatre, museums, concerts, festivals for personal and educational fulfillment				
PI.4.a	Proportion of population which lives within ½ mile of art or cultural facilities			
PI.4.b	Proportion of population which lives within ½ mile of a historic preservation site			
PI.4.c	Percent of schools offering arts education			
PI.4.d	Designated federal, state and city funding for the arts			
PI.4.e	Proportion of population which lives within 1 mile of a public library			
PI.4.f	Art/cultural facilities within ½ mile of a regional transit stop			
Objective PI.5 Assure affordable and high quality public health facilities				
PI.5.a	Proportion of population covered by health insurance by type of insurance	n/a	87.%	no target set
PI.5.b	Primary Care - Health Professional Shortage Area	n/a	643	no target set
PI.5.c	Dental - Health Professional Shortage Area	n/a	n/a	no target set
PI.5.d	Percentage of mothers receiving prenatal care in first trimester	n/a	n/a	no target set
PI.5.e	Mental Health - Health Professional Shortage Area			
PI.5.f	Access to drug treatment facilities			

PI.5.g	Ambulatory care sensitive conditions			
PI.5.h	Racial/ethnic demographics of health care providers compared to population served			
PI.5.i	Availability of language interpretation at health clinics and hospitals			
PI.5.j	Number of hospital beds per 100,000 population			
PI.5.k	Health facilities within 1/2 mile of a regional transit stop			
PI.5.l	Distribution of health care facilities relative to population density			
<i>Objective PI.6 Assure access to daily goods and service needs, including financial services and healthy foods</i>				
PI.6.a	Neighborhood completeness indicator for key public services	n/a	n/a	insufficient data
PI.6.b	Neighborhood completeness indicator for key retail services	n/a	n/a	insufficient data
PI.6.c	Proportion of population within 1/2 mile from full-service grocery store/supermarket			
PI.6.d	Proportion of retail food facilities accepting EBT/food stamp/WIC	n/a	n/a	no target set

Element E. Adequate and Healthy Housing

Objectives

HH.1 – Preserve and construct a diversity of housing in proportion to demand with regards to size, affordability, tenure and location

HH.3 – Increase opportunities for home ownership

HH.4 – Increase spatial integration by ethnicity and economic class

Summary of Findings

The plan needs to have actionable targets regarding “multi-group diversity.” The addition of specific language within the Subarea Plan requiring and incentivizing development of affordable housing at various income ranges would address the demand for below market rate housing. An example could be incorporating some kind of public benefits program where additional height and density bonuses are granted incrementally for the addition of affordable housing above current inclusionary levels. Additionally, the Plan could incorporate language for additional incentives to develop affordable rental units.

The Mayor’s HOME 15/5 initiative (August 3, 2005) establishes a goal of 15,000 new homes to be built in the next 5 years, of which 5,400 are to be affordable to low and very-low income families. Requiring and incentivizing the development of affordable housing in East SoMa could help meet the Mayor’s goal. East SoMa provides an opportunity to develop a healthy new community that meets city and regional housing needs

Additional Policy Strategies

- Given that area plans do not change for decades at a time, it would be good foresight to include policies in the East SoMa Subarea Plan that can help protect affordability and tenant’s rights as East SoMa and surrounding areas continue to develop.
- With the influx of large numbers of market rate housing and new residents, the property values of adjacent neighborhoods will surely increase and place current residents in danger of increased rents and displacement. To help offset this impact, development impact fees could be negotiated between the impacted communities and developers. Reference ENCHIA policy brief *Development Impact Fees*.
- Strengthen First Time Home Buyers programs through the Mayor’s Office of Housing to allow households who may not be able to enter the housing market to be able to purchase homes in East SoMa. This would help diversify the residents of East SoMa and help meet housing demand among moderate-income earners.
- Ensure that a “*First Source Hiring Program*” is implemented. This would give neighboring community residents opportunities to earn income from East SoMa

development and thus increasing their ability to afford housing. See ENCHIA policy brief *Strengthen First Source Hiring Program* and 2004 Housing Element Policy 8.1.

- The Planning Department can mandate the development of more inclusionary units in exchange for zoning incentives, such as height increases, changes in set backs, and density requirements. Reference ENCHIA policy brief *Increased Inclusionary Housing for Zoning Incentives*.

- Create more opportunities for affordable housing. Reference ENCHIA policy brief *Master Strategy for Funding Affordable Housing Development*.

- Coordinate City's economic development plans, including new industries and future job projections, with housing production, using Jobs-Housing Nexus Studies.

- Increased density and height will likely allow an increase the value of the land. A portion of the increased land value should be calculated for use of onsite affordable housing. Reference ENCHIA policy brief *Increased Inclusionary Housing for Zoning Incentives*.

Element F. Healthy Economy

Objective HE 1 Increase high-quality employment opportunities for local residents

The city of San Francisco has one of the highest minimum wages in the country. However, according to the self-sufficiency standard--which considers family size and the cost of living, including food, clothing transportation, taxes, child care, health care in a specific county--San Francisco's minimum wage is insufficient. The data show that SoMa/Potrero Hill residents are significantly more likely to live below the self-sufficiency level compared to the citywide average (42.4% versus 26.2%) and less likely to have completed high school (22.9% of SoMa residents do not have a high school degree versus 18.8% citywide). However, East SoMa includes large amounts of land zoned for PDR and other light industry, which provide well-paying blue-collar jobs for workers with lower levels of education. While 56% of available jobs in the city of San Francisco are held by San Francisco residents, data regarding the proportion of SoMa residents who work in the City is not available.

There are no objectives or policies in the Plan that specifically address the quantity or quality of employment available to SoMa residents. However, the Plan includes several objectives and policies to support existing businesses and to maintain the unique mixed-use character of East SoMa. Examples include policies to "provide sufficient land and building area" (Policy 1.1.1, p. 3) and to "protect and facilitate the expansion" of a variety of production, distribution and repair (PDR) businesses, commercial, manufacturing, light industry, small offices and arts activities (Policies 1.1.2, 1.1.3, and 1.2.1; p.3-4). While these policies help to create a supportive environment for potential employers and will likely increase the number of jobs for local residents, there are no implementing actions or recommendations that guarantee an increase in the number of entry-level jobs providing a self-sufficiency wage or incentives for training and hiring local residents. The one policy that has the greatest potential to prevent the loss of land for PDR use (Policy 1.1.3) is a recommendation rather than a requirement.

Objective HE.2 Increase jobs that provide healthy, safe and meaningful work

Currently 60.5% of San Francisco residents have health insurance coverage provided through their own or a family member's employer, and 76.7% of San Francisco workers have sick day benefits. Data specific to East SoMa is not available.

Although the minimum development target of 70% of new jobs providing health insurance is not met overall in the city at the present time, the implementation of the Worker Health Care Security Ordinance (WHCSO) in July 2007 is likely to improve the situation. The ordinance requires establishment of a San Francisco Health Access program (SF HAP) to be funded through a combination of employer, city, county, and

individual contributions, to provide comprehensive healthcare services to uninsured San Francisco residents at a reasonable cost, regardless of income, immigration status, or medical condition. The city currently meets the minimum development target of 70% of jobs providing sick leave and is likely to meet the benchmark of 80% and eventually the maximum of 100% with the implementation of Proposition F. Proposition F requires employer paid sick leave for all employees, including temporary and part time employees, effective February 2007. As it is currently written, the East SoMA Plan will have no impact on the proportion of jobs providing health care insurance, sick leave, or retirement benefits to employees.

Objective HE.3 Increase equality in income and wealth

San Francisco has some of the highest income disparities in the state of California. The average income of the wealthiest fifth of San Francisco households is more than 20 times that of the poorest fifth of San Francisco household (\$208,820 vs. \$10,019).

The Plan includes several policies which may *indirectly* address income inequality. Creating mixed residential areas by encouraging the development of affordable housing (Policy 1.2.9, p. 6) and diversity in sizes/number of bedrooms in homes (Objective 2.3, Policies 2.3.1 and 2.3.2; pp. 16-17); creating incentives for rental housing (Policy 2.3.3, p. 17), and establishing incentives for building housing within East SoMa (Policy 2.3.4, p. 17) may reduce the financial burden for low- and moderate-income SoMa residents. Similarly, objectives and policies that encourage new construction of SROs and efficiency units (Policy 2.5.1, p. 18), establish affordability standards (Policy 2.5.2, p. 19), and support rehabilitation of existing SROs and efficiencies (Policy 2.5.3, p. 19) should provide additional affordable housing for low-income, elderly, disabled, and one-person households. While these policies are important for maintaining and improving the quality of life for low-income people, they will not diminish the gap between rich and poor. To do so, the Plan must include polices that would result in increased income for poor households, such as job training and placement, higher wages, and increased employment opportunities.

Objective HE.4 Increase benefits to communities impacted by development

Development can have positive effects on a community by increasing the availability of goods, services, and jobs. San Francisco residents currently hold 56.1% of available jobs in the city, and 77.3% of San Francisco residents work in San Francisco. The supply of jobs exceeds the number of residents. Data specific to East SoMa is not available. Development can also have negative effects by increasing local demand for—and prices of—housing as well as raising the cost of consumer goods and services. Jobs/Housing linkage fees are a means of offsetting the impact that new employment has on housing needs in a community. The San Francisco Jobs/Housing Linkage Program is supported by a city ordinance that requires all new and expanded commercial development projects that add at least 25,000 square feet to the current real estate supply to pay \$14.96 per square foot of commercial office development, \$11.21 per square foot for hotel; \$13.95 per square foot for entertainment/ retail; and,

\$9.97 per square foot for research and development.

Although the Plan includes an objective to promote existing businesses and facilitate their expansion (Objective 1.1, p.3), there are no policies that explicitly address job creation for local residents or high prices that may result from development. The city ordinance requiring developers to pay linkage fees to mitigate their projects' impact on housing will likely increase availability of affordable housing in San Francisco. However, the ordinance only applies only to new or expanded development of 25,000 or more square feet. Additionally, there is no mechanism to ensure that employees hired by development projects will be residents of San Francisco. The minimum development target is met because of the requirements of the city ordinance; however, data regarding new or expanded development of 25,000 or more square feet in SoMa or East SoMA are not available.

Element F. Healthy Economy (HE)		SoMA data	SF data	Met development target?
Objective HE.1 Increase high-quality employment opportunities for local residents				
HE.1.a	Jobs paying entry level wages greater than or equal to the self-sufficiency standard	n/a	45.0%	no target set
HE.1.b	Proportion of households living on income above the Bay Area self-sufficiency standard	57.6%	73.8%	< min
HE.1.c	Proportion of jobs available in San Francisco filled by SF residents	n/a	56.0%	min
HE.1.d	Land zoned for production, distribution and repair (PDR) uses	n/a	n/a	insufficient data
HE.1.e	Proportion of estimated entry level jobs accessible to individuals with a GED / high school diploma	n/a	n/a	n/a
Objective HE.2 Increase jobs that provide healthy, safe and meaningful work				
HE.2.a	Jobs providing health insurance to employees	n/a	60.5%	< min
HE.2.b	Jobs providing sick days benefits to employees	n/a	76.7	min
HE.2.c	Jobs providing retirements benefits to employees	n/a	n/a	n/a
HE.2.d	Proportion of unemployed served annually by job training programs			
HE.2.e	Total occupational injury rate disaggregated by industry type	n/a	n/a	n/a
Objective HE.3 Increase equality in income and wealth				
HE.3.a	Income inequality	n/a	top 5th earns 20x more than bottom 5th	no target set

HE.3.b	Unemployment by race	n/a	n/a	no target set
Objective HE.4 Increase benefits to communities impacted by development				
HE.4.a	Proportion of jobs available in San Francisco filled by SF residents	n/a	56.0%	min
HE.4.b	Percentage change in Consumer Price Index compared to national average	n/a	0.7 percentage point increase (2004-2005)	< min
HE.4.c	Proportion of locally owned businesses	n/a	n/a	no target set
Objective HE.5 Benefits and protects natural resources and environment				
HE.5.a	Businesses meeting or exceeding city green business standards			
HE.5.b	Proportion of jobs accessible within 1/2 mile of regional transit link			
HE.5.c	Proportion of jobs available in San Francisco filled by SF residents	n/a	56.0%	< min

Meetings with Stakeholders

(1) Planning Department March 1, 2007

The meeting opened with Sue from the Planning Department giving a brief history of the East SoMa sub-area plan. Additionally, she gave some history of the collaboration between the Planning Department and other city agencies. In the past, Planning Department collaboration with other agencies has been the norm – e.g., Parks & Recreation, MTA, Mayor’s Housing. However, collaboration with the Department of Public Health is fairly new. In the past, health did not directly play into the planning process.

The origins of zoning came out of health considerations. The law only requires the city to care about traffic and pollution. State law requires a general plan for the city. There exist two types of planning: current and long term planning. According to Sue, “zoning is the only tool of the planning department.” The sub-area plan should guide development and zoning. The planning department is interested in implementing an “impact fee” in order to capture redevelopment taxes for community benefit.

Regarding the Plan

The planning department is striving to get agreement on the plan. They try to be collaborative by attending community meetings and responding to community benefits.

Environmental Impact Reports (EIR) – EIR is the legal document that exists. The EIR must be certified before the hearing or the plan cannot be approved. EIR used as a tool by people who want to oppose something. What are the limitations of EIR?

**(2) San Francisco Planning and Urban Research Association (SPUR)
March 3, 2007**

The San Francisco Planning and Urban Research Association (SPUR) is an organization with several thousand members involved in urban planning and advocacy in the San Francisco Bay area. SPUR has several working committees that focus on city management and finance, healthcare, sustainable development, transbay and citywide transportation, and green waterfront development. SPUR has a vested interest in the East SoMa Area Plan and recommendations for the further development of the Health Development Measurement Tool.

According to SPUR's analysis, transportation is an issue of utmost importance in the development of East SoMa. They view East SoMa as the gateway to downtown San Francisco. As such, it is central to transit and economic development for the entire Bay Area. SPUR envisions a central transbay terminal being located in East SoMa. Through an array of local transit options, this terminal will link the greater Bay Area to downtown San Francisco.

To achieve this vision, the East SoMa Area Plan must include both direct and indirect provisions in support of developing the area into a central transit hub. Direct provisions include (1) zoning land for the construction of a transbay terminal and (2) zoning land for transit infrastructure development that creates links to regional and local transit options. Indirect provisions are related to increasing the neighborhood's population density. High population density is a key factor in creating transit hubs because, with more people, the use of private vehicles becomes more inconvenient and there are more potentially paying users of public transit. To increase population density in East SoMa, SPUR envisions significant amounts of vertical growth. The organization recommends that the Sub-area Plan include provisions to raise the building height limits to 85 feet on 4th Street.

SPUR has two major recommendations for the Tool. First, the organization would broaden its emphasis to include regional as well as local measurements. Currently, the Tool encourages users to find and analyze neighborhood-level data and, if that is unavailable, citywide data. However, SPUR argues that because the development of San Francisco neighborhoods has such an enormous impact on transit for the entire Bay Area, regional-level impact is just as important if not more important than local impact. From the organization's standpoint, the way in which urban planning impacts millions of Bay Area commuters should take precedence over the needs of the thousands of neighborhood residents.

SPUR's second recommendation is to include an additional analytical step that asks users of the Tool to weigh the consequences of developing against the consequences of not developing. In doing so, a Tool user would assess the potential impact of building a transit hub in East SoMa and then compare this to an assessment of the potential impact of not building a transit hub. SPUR believes that the negative consequences for

the city and region of not developing a transit hub far outweigh the immediate consequences for residents of developing the transit hub. The Tool currently only encourages users to compare the present status with the future status, given implementation of a particular planning policy, and not with the future status should the policy not be followed.

**(3) South of Market Community Action Network (SOMCAN)
March 22, 2007**

On March 22, 2007, members of the DrPH team and the SFDPH staff met with the South of Market Community Action Network (SOMCAN) organization. SOMCAN was formed during the late 1990's to promote resident involvement in the SoMA neighborhood planning process. This neighborhood engagement comprises of initiatives involving resident leadership training and organizing. SOMCAN's activities are devoted towards collective neighborhood empowerment and action in SoMA for the healthy development of land use.

SOMCAN identified three main priorities in the planning process. These included affordable housing, pedestrian safety, and job development. According to SOMCAN, SoMA provides 50% of new housing stock. Of concern to SOMCAN are the super towers that exceed 400' in height. These super towers extract vast neighborhood resources given that the housing need has already been surpassed. Furthermore, they contribute to traffic congestion from an increase of cars in the area. SOMCAN identified a traffic study for SoMA as a need, possibly completed by 2012. The reduction of traffic is needed for other neighborhood needs such as pedestrian safety.

Additional housing issues identified included lofts being built in the late 1990's. Due to loopholes in regulations, they were considered to be light industrial and did not contribute taxes. Other issues involving housing loopholes included single residency occupation (SRO) units or efficiency hotels along the street front. The SROs do not contribute to open space, take up public realm and typically lack families. Possible issues involving residents of SROs according to SOMCAN may include mental health issues, traffic noise due to proximity of busy streets and the freeway, and vulnerability based on mental or physical challenges or socio-economic hardships.

SOMCAN believed the HDMT to be useful for framing dialogue around the health impacts of development. It supports their vision of a more holistic encompassing view of the SoMA neighborhood.

Conclusions and Recommendations

In applying the Healthy Development Measurement Tool to the East SoMa plan, the DrPH team has found that the instrument provides a powerful and innovative way to analyze land use plans and policies. By allowing users to view city planning issues through the lens of public health, the Tool creates a unique opportunity for multiple stakeholders—city agencies, community-based groups, local residents, and others—to examine development proposals, identify strengths and weaknesses, and make recommendations for changes based on health-related data and metrics rather than whim or personal preferences.

The Tool also highlighted for the team the importance of paying close attention to the built environment, an emerging focus and concern of public health. By categorizing, quantifying and operationalizing many of the concepts that have become increasingly prominent in research on the health impacts of the built environment, the Tool can play an important role in translating these ideas from the pages of peer-reviewed journals into practical strategies that can influence events—and development plans—in the real world.

For the DrPH team, the project provided an excellent opportunity to learn and experience first-hand the utility of conducting health impact assessments. Given that this is a relatively new approach in public health, this project has helped team members reframe their views on why public health professionals need to be engaged with city planning and land use processes, and how they can influence these decisions in a constructive and cooperative manner. It has also broadened team members' understanding of how city agencies—even those, like public health and planning departments, that are sometimes in disagreement over priorities—can start to bridge the divide, work closely together, and seek common ground. The experience, therefore, will undoubtedly inform team members' future public health perspectives and approaches as they pursue their careers in the field.

In addition, the project has taught the DrPH students a great deal about working together as a team—identifying goals, coordinating tasks, communicating with each other and with clients, organizing and facilitating meetings, and seeking to resolve problems or conflicts as they arise. These skills, while not specifically focused on planning processes or healthy development, will nonetheless be invaluable to members of the team in future professional assignments.

HDMT Strengths

In reviewing the individual findings for each element, objective and indicator, the team has found that the formidable strengths of the Healthy Development Measurement Tool include:

- *Demonstrating how an area plan is likely to either help or undermine the health of a community and those who live there;
- *Highlighting weaknesses in an area plan, either because an indicator related to a particular health concern is not being met currently or is not likely to be met under current plan provisions and policies;
- *Highlighting neighborhood health threats that are frequently beyond the scope of traditional city planning processes and departments and may need to be addressed by other agencies;
- *Providing interested community members and others an opportunity to evaluate for themselves the impact an area plan or development strategy is likely to have on public health indicators, which may empower them to provide input into the planning process;
- *Focusing much-needed attention on the built environment and its impact on health outcomes, and ensuring a practical and actionable way to demonstrate that impact; and,
- *Encouraging public health or other professionals to work in interdisciplinary teams, combining their expertise and experience to concentrate on issues that span across disciplines.

HDMT Challenges

The DrPH team's application of the Healthy Development Measurement Tool also highlighted a number of challenges that are likely to be faced by others seeking to use the instrument in analyzing the East SoMa plan or other area plans and developments. Moreover, the fields of city planning and public health employ different languages and are charged with pursuing tasks that sometimes appear to be in conflict. As such, the ultimate effectiveness of applying such an instrument to effect change remains unclear. This is not surprising, given that health impact assessments represent a relatively new approach to promoting public health; as this sort of instrument becomes more common and standardized, some of these challenges are likely to dissipate.

Among the biggest challenges for the DrPH team was the learning curve required in order to apply the Tool correctly. The team underestimated the time it would take to perform the analysis of each element, objective and indicator and originally committed to test-running more indicators than turned out to be feasible or possible, given the time constraints of the semester. One reason, undoubtedly, was the team's lack of familiarity with city planning and development issues, which hindered members' ability to analyze the findings to the depth desired. Another problem was a general lack of familiarity with the SoMa district, which complicated the ability to add qualitative data from first-hand knowledge of the neighborhood.

Challenges Identified by DrPH Team

- *Learning how to apply the tool without in-depth familiarity with either the neighborhood itself and the city planning process;
- *Determining how to give teeth to recommendations derived from applying the tool and how to make the recommendations actionable;
- *Determining who is responsible for effecting changes that are not normally under the control of developers themselves, such as changes in transportation systems or an increase in child-care centers or public health facilities;
- *Deciding on recommendations when there are, for example, no specific development targets associated with a particular indicator or when an indicator addresses an issue that has no relation to the area or land use plan.

General Recommendations

Each member of the DrPH team has included specific recommendations for elements, objectives and indicators in the HDMT worksheets and in the summary findings for the various elements. However, based on the above findings, the team also believes that certain more general steps can help render the Tool more effective as a community-based instrument to promote public health and influence the planning and land use process. These recommendations to the San Francisco Department of Public Health include the following:

- *Because familiarity with the concept and significance of health impact assessments is important for people to understand the concepts behind the Tool, it would be helpful to provide potential users with information. This could be done either in written or verbal form, for example offering a workbook or workshops, with some background information on this emerging public health approach;
- *Because familiarity with the city planning is important for people to effectively apply the tool, it would be useful to offer them a short seminar on land use concepts, vocabulary and practices, perhaps combined with a careful reading of one or two area or development plans;
- *Because familiarity with a particular neighborhood or geographic area is also important to effectively apply the tool, it would be useful to facilitate early communication between people applying the tool and community stakeholders and organizations;
- *When an indicator has no development targets, it would be useful to include an explanation as to why that is the case; otherwise, it is difficult for the user to determine how to judge the plan against the metrics provided by the Tool; and,

*Not all indicators are relevant for all land use plans, but it can be hard to determine if that is a deficiency of the plan being analyzed or, alternately, if that particular plan cannot be expected to address the issue pertaining to the indicator. Therefore, it would be useful to incorporate clear guidelines on how to distinguish between those two circumstances.

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