Single Room Occupancy Hotels in San Francisco

A Health Impact Assessment

DRAFT REPORT – SPRING 2016

Not Intended For Distribution

Health Impact Assessment Program
San Francisco Department of Public Health

Department of PUBLIC HEALTH

The Centers for Disease Control and Prevention (CDC) provided funding for this work through the Health Impact Assessment to Foster Healthy Community Design grant.

This report was prepared by

The San Francisco Department of Public Health
The Health Impact Assessment (HIA) Program
HIA Project Director: Cynthia Comerford

Contact
Cynthia Comerford, Manager
Office of Policy and Planning
San Francisco Department of Public Health
101 Grove Street, Suite 330
San Francisco, CA 94102
Phone: 415-554-2626
Cyndy.comerford@sfdph.org

The Health Impact Assessment Program Team
Meg Wall Shui, Senior Epidemiologist
Max Gara, Health Impact Assessment Project Coordinator
Devan Morris, GIS Developer and Analyst
Megan Wier, Director, Program on Health, Equity & Sustainability
Kristen Barrera, Research Assistant
Page Kruza, Research Assistant
Paula Jones, Director of Food Systems/Office of Equity and Quality Improvement

Acknowledgments
San Francisco Department of Public Health (SFDPH) provided funding for staff to participate in this project.

The Centers for Disease Control and Prevention (CDC) provided funding for this project through a Health Impact Assessment grant (CDC-RFA-EH11-1104).

Colleagues and organizations were generous with their time and ideas. Please see Appendix I for all of the stakeholders' organizations who participated in this process.

Table of Contents

List of Tables

List of Figures

List of Acronyms

APS- Adult Protective Services
DBI- Department of Building Inspections
GIS- Geographic Information Systems
HIA- Health Impact Assessment
HIS- Housing Inspection Services
HFDS- Housing Facts Data Standards
HSA- Human Services Agency
PHD- Population Health Division
SFDPH- San Francisco Department of Public Health
SRO- Single Resident Occupancy

Executive Summary

In San Francisco, single room occupancy (SRO) hotels make up the largest supply of low-cost housing for our most vulnerable neighbors—seniors, adults with disabilities, and children. While much work has been done to try to improve the living conditions within and around SROs, many quality of life issues persist. **The objective of this health impact assessment (HIA) was to identify and evaluate current living conditions in and around SROs and potential policies to improve the health of residents in SROs**. Because no discrete policy target was proposed, SFDPH staff went through an extensive exploratory outreach process to help determine what policies would benefit the most from examination with HIA. The chosen policies for analysis include: 1) Requiring or incentivizing SRO operators to obtain an SRO Operator Training Certificate; 2) Increasing facility data reporting requirements for certain SRO housing attributes (e.g. number of rooms); and 3) Incorporating data analytics and enhanced data analysis into City department operations.

The HIA employed mixed research methods (quantitative analysis, focus groups and key stakeholders interviews, and literature review*)* to identify potential policies, examine existing conditions relevant to SRO, tenants' health, evaluate departmental inspection processes, and estimate the impact the potential policies would have on SRO resident health.

Key Findings

Existing Conditions

- SRO buildings are older on average than San Francisco's housing stock. The majority of SROs were constructed immediately after the 1906 earthquake (median year 1909, average year 1914), unlike the majority of housing stock in San Francisco (median year 1927, average year 1932).
- The majority (88%) of SRO rooms are located in six zip codes: 94102, 94103, 94108, 94109, 94110, and 94133, which roughly cover the Tenderloin, Nob Hill, South of Market, Mission, Chinatown, North Beach, and Russian Hill.
- It was most common for SRO buildings in all zip codes to have between 0-5 violations issued between 2008 and 2012; however, zip codes 94102 and 94103 had a higher proportion of SRO buildings receiving over 20 violations during the 5 year period.
- The top five most common violations in SROs were for: animals/pests; mold; refuse; sanitation; and structural conditions. This is likely influenced by the predominance of DPH records in the data set.
- The most common potential health outcomes from these violations include: respiratory illness, gastrointestinal illness, injuries from trips and falls, and psychological distress.
- While 30% of the city's land area and 50% of the city's population is within ¼ mile of a SRO, the density of neighborhood challenges found in that quarter mile buffer is disproportionately higher with respect to off-sale alcohol outlets, pedestrian injuries, and crime, for which approximately two-thirds of the city totals are concentrated within ¼ mile of SROs.
- SROs are generally located in areas of the city with high access to food resources, including supermarkets, small grocery stores, produce shops, and meat markets, and the city's public health facilities. However, proximity is not always a good indicator of access, due to issues including disposable income, time, mobility, living situations, and other constraints.

- Hospitalization and emergency room (ER) admission rates for residents of zip codes that contain the majority of SROs, show that individuals are being treated at higher rates for many of the same health outcomes that are associated with the most common violation types, including: adult asthma hospitalization rates that are twice the city average, chronic obstructive pulmonary disease rates that are three times the city average, ER admissions for falls that are 2-3 times the city average, and ER admissions for self-inflicted injuries that are 3-4 times the city average.
- Zip codes 94102 and 94103 (the Tenderloin and South of Market) experienced both the highest hospitalization rates as well as the highest violation rates. While the examined hospitalizations may not all be attributable to housing conditions, they do indicate that the resident population in those neighborhoods may be particularly vulnerable to the impact of commonly found violations in SROs.
- In sum, this evidence supports the finding that residents living in SROs have numerous vulnerability factors, including being lower income, people of color, and older age, as well as living in buildings and communities with more concentrated environmental risk factors that contribute to adverse health outcomes. The combination of demographic and environmental vulnerabilities can contribute to poor health outcomes, including increased hospitalization rates – and can benefit from targeted policy changes to protect and promote resident health

SRO Operator Focus Groups and Key Informant Interviews

- The focus group revealed that SRO operators had adequate knowledge of Health, Housing and Fire Codes. As such, it is unlikely that a training focused solely on City codes would significantly improve compliance or tenant health.
- Participants spoke about the fragmentation of Health, Housing and Fire codes and expressed the need for centralized information and a better understanding of each agency's role.
- SRO operators lacked knowledge and/or practices on how to effectively work with tenants and housing issues that resulted from tenant behavior (e.g. hoarding, bed begs) and were not aware of the primary health outcomes of poor housing quality (e.g. asthma, allergies, injuries and falls, skin conditions, burns and fire injuries, and lead poisoning).
- Mental health was seen as a significant health problem, as well as health issues associated with the elderly population, drugs, and alcohol. There was consensus that there has been a dramatic increase in mental health issues over the last five years and the notion of "extreme tenants" impacting the health of other SRO tenants.

Data Analytics Literature Review

- Case studies and existing literature on open data strategies do not necessarily demonstrate they have had direct improvements in health outcomes, but they do indicate that these strategies can potentially lend themselves to increasing the efficiency of public health operations, improving data quality, timeliness, and usefulness, improving data access, and promoting government transparency.
- Case studies demonstrated that increased data analytics alone do not lead to vast improvements. Rather, inter-agency working groups and forums for continuous quality improvement, coupled with data analytics and strong leadership support, appear to work best.

Recommendations for SRO Operating Training Certificate and Housing Data and Data Analytics Policy

Recommendation # 1: A mandatory training for SRO operators that focuses on successfully working with the SRO tenant populations, increasing knowledge of health outcomes, and understanding the role of City agencies and management best practices.

SRO operators need to have the know-how, skills, and tools to address the problems they are facing. Without adequate knowledge, SRO operators may not be confident enough to act or may not know how to resolve issues. Research indicates mandatory trainings are more effective than voluntary trainings and can potentially reduce critical violations.

Recommendation # 2: The creation of culturally competent and consolidated educational materials for SRO operators that would serve as a one stop guide.

Given the diversity of operators' roles and responsibilities, this "one stop guide" will touch upon: code compliance, City agency information, and tenant support.

Recommendation #3– Standardize and automatically publish housing inspection data, including collection of SRO facility attributes.

Health Inspection and Department of Building Inspection data is currently only available through search functions on their respective websites. There is no regular data publication of all the data or as a dataset. Data publication would likely improve the visibility of the activities of the housing inspection programs, the housing existing conditions, and the level of property maintenance. The main types of end-users are the departments themselves, the public, developers, property managers, and tenant advocates.

Recommendation #4– Incorporate data analytics into business operations.

Performing analysis on the data will provide insight on how to adjust inspection business processes. Data-driven planning may improve performance on the metrics of violation detection rates, abatement rates, and abatement speeds. The departments could better understand their current capacity by reviewing the frequencies, averages, and ranges of violations by district, violation types, building types where violations occur, abatement rates, and abatement times.

Recommendation #5– Create an interagency housing inspection data sub-committee to establish and track performance measures.

Expanding coordination between the housing inspection units departments could facilitate departments to share best practices, observe where their activities overlap, and improve coordination on enforcement of cases. Currently, there is not a forum to discuss the housing inspections process specifically or how case management data and publication might strengthen the programs.

SECTION ONE: INTRODUCTION

Objective

In San Francisco, single room occupancy (SRO) hotels make up the largest supply of low-cost housing for our most vulnerable neighbors—seniors, adults with disabilities, and children. While living environments vary widely between SROs, many of the 18,000 low-income San Franciscans living in the city's over 500 SROs live with structural, habitability, and sanitation problems. Many SRO residents also have pre-existing conditions that can be exacerbated by poor housing quality or fit. This health impact assessment (HIA) examines three potential policies around the City and County of San Francisco's SRO inspection programs and initiatives to improve SRO operator capacity and increase city-wide data collection and use of data analytics as it pertains to housing quality. This document describes the context for the HIA, the policy selection and screening stage, the scoping stage, the findings from the assessment of the policies' potential impacts, the methods used for each HIA stage, and five key recommendations for moving forward. The objective of this HIA was to evaluate conditions and potential policies to improve the health of residents in SROs. HIA can be a powerful tool to systematically analyze data, predict potential health outcomes of proposed policies and call for evidence-based action. This HIA builds on existing policy research, past work from diverse stakeholders, and the collective problem solving efforts of those working to improve the health of SRO residents.

Background

History

Single room occupancy (SRO) hotels are a form of housing comprising rooms intended to house one to two individuals. A typical SRO room is 8 feet by 10 feet with shared toilets and showers down the hall.[i] Most of San Francisco's SROs were built in the early 20th century as housing for low-wage workers, transient laborers, and recent immigrants.[ii] However, in the 1960's the population occupying SROs began to shift due to decreasing demand for unskilled labor and the desire to mainstream psychiatric hospital populations.[iii] According to Paul Groth, in his 1994 book *Living Downtown: The History of Residential Hotels in the United States*, welfare departments began sending more unemployed and elderly people to residential hotels for temporary housing that frequently became permanent. At the same time there was a movement to deinstitutionalize psychiatric patients, with the promise of building halfway houses and group homes; however, supportive housing was never established and many patients were essentially dumped into downtown SROs, where hotel operators were un-prepared to support their needs.[iv]

Between 1975 and 1988, San Francisco lost 43% of its low-cost residential hotels.[v] Today most of the remaining hotels are concentrated in four neighborhoods: the Tenderloin, Chinatown, South of Market, and the Mission. These neighborhoods are characterized by lower median household incomes, higher poverty, and larger immigrant populations. While it is difficult to assess the exact population living in SROs, a 2009 report estimated that roughly 18,500 people lived in the 530 buildings inventoried at the time.[vi] As of 2013, 501 SROs were accounted for in the San Francisco Housing Inventory. The Housing Inventory also shows that between 2000 and 2013 there was a net loss of 263 rooms in SROs, with 2,438 rooms lost from for-profit establishments offset by an increase of 2,165 rooms in non-profit

establishments. Monthly rents in privately owned and operated buildings typically range from $650-$700, but rooms can go for as high as $1,000. The majority of SROs in the City are privately owned and operated (414), with the remainder (87) being operated by community based organizations like Episcopal Community Services and Tenderloin Neighborhood Development Corporation, or master leased by the San Francisco Human Services Agency (HSA) and San Francisco Department of Public Health (SFDPH). SFDPH also leases a number of "stabilization rooms" in privately owned buildings that are used for temporarily housing formerly homeless individuals coming off the streets or out of the hospital.

Policy Context

Following the demolition of nearly half of San Francisco's SRO stock in the 1970's and '80's, a number of policies have been established and taskforces formed to protect and promote the maintenance of SROs as a source of affordable housing for the city.[vii] In 1980 the Residential Hotel Demolition and Conversion Ordinance, administered by the Department of Building Inspection (DBI), was first adopted. The ordinance protects the existing stock of SROs by requiring permits for conversion of rooms to tourist use, imposes a strong replacement provision, and mandates a fee (80% of the replacement cost) be paid to the city's affordable housing replacement fund if residential rooms are taken offline due to conversion or demolition. This policy has led to a significant decrease in the loss of SRO units; however, some have noted that the current policy does not support rebuilding SRO buildings that have reached the end of their useful life.[viii] In response to a rash of fires and chronic code violations in residential hotels, the SRO Task Force was first established in 1999 to address health and safety issues affecting SRO residents. This taskforce is coordinated by DBI, with representatives from DBI, SFPDH, HSA, the City Attorney's Office, and nine representatives appointed by the Board of Supervisors that represent SRO collaboratives from the four major neighborhoods, SRO tenants, private SRO operators, and nonprofit SRO operators. The Task Force's purpose is to facilitate a unified SRO strategy that is supported by the Mayor, the Board of Supervisors, City departments, nonprofit agencies, owners, managers, tenants and the community at large. In 2007, a Task Force on Compulsive Hoarding was also started to identify gaps and barriers in services, assess current needs, identify best practices, and make policy recommendations to prevent and mitigate the impacts of hoarding, which can create habitability issues in SROs.

While much work has been done to try to improve the living conditions within and around SROs, many of the same problems still exist, including: unsafe and unsanitary conditions, food insecurity, overcrowding with families, violations of tenancy rights, open drug use and other illegal activity, violence, social isolation, and lack of supportive services. Recognizing the gravity of the health impacts these conditions have on residents, the San Francisco Health Commission passed a resolution in September of 2013 requesting that SFDPH's Population Health Division (PHD) carry out an HIA to evaluate "food security and other conditions to improve the health of residents in SROs."[ix] Because no discrete policy target was proposed, SFDPH staff conducted an extensive exploratory outreach process to help determine what policies would benefit the most from examination with HIA. Section Two describes the process used to select the polices that are evaluated in this HIA.

Policies: What is being evaluated in this Health Impact Assessment?

The potential policies examined by this HIA include the following: **1) Ordinance amending the San Francisco Health Code (Article 11, Sec. 594 - 609.2) which would define a SRO and either a) require SRO operator education on compliance with Health, Housing, and Fire Codes as a condition for the Certification of Sanitation or b) establish a voluntary training incentive; 2) Ordinance amending the San Francisco Administrative Code (Chapter 41.10) to require SRO data reporting on structural elements of the building as part of the required SRO Annual Unit Usage Report; and 3) SFDPH's engagement in a coordinated data systems with the Department of Building Inspection (DBI) and enhanced inspection analytics** (refer to Table 1 for policy details)**.** Specifically, this HIA explored the potential health impacts of modifying the current requirements for a Certificate of Sanitation from SFDPH and the Annual Unit Usage Report submitted to DBI for SRO operators to include the requirements listed in Table 1.

Table 1: Potential Policies

Requirement	Managing Entity	Detail
SRO Operator Training Certificate	SFDPH	In coordination with DBI and Fire, SFDPH will provide training on health, housing, and fire codes pertaining to SRO facilities; best practices in building operations (e.g. security, bed bugs, etc.); and resources to work with residents.
Facility Data Reporting	DBI	Requirement to report additional information on housing attributes including: number of rooms, toilets, showers, and rooms capable of supporting microwaves and refrigerators, disability accessibility, etc.
Data Analytics / Enhanced Analysis of Data	SFDPH	Establish interagency working group for development and monthly tracking of performance metrics for quality improvement and measurement of impact.

The HIA focused on three areas of consideration that were driven by the following research questions

A. **Exposures and Associated Health Impacts: Baseline Conditions**
   1. What are the characteristics of SRO facilities?
   2. What are current patterns of SRO violations? What are the health impacts of the primary violation categories?
   3. What are population demographics, neighborhood conditions and health status of communities with a high volume of SROs?

B. **Potential Policies: Existing Conditions and Projected Policy Impact**
   1. ***Questions for SRO Operator Training:***
      a. What is the status quo with respect to SRO operator education and training regarding health-related violations and safety?
      b. How would the potential policy impact on operator practice with respect to health-related violations and safety?
   2. ***Questions for Housing Data and Data Analytics:***

a. What is the status quo with respect to data collection, reporting and analytics related to SROs and code enforcement?
b. How would the potential policy impact internal and external practices related to SROs and identification and remediation of health-related violations? Specifically – how would stakeholders (City agencies, private organizations, non-profit agencies, SRO operators) respond to more transparency and increased data collection and interdepartmental operability? And how would this impact the identification and remediation of health-related violations?

These questions informed the HIA process and the structure of the assessment section.

SECTION TWO: HIA PROCESS

Policy Identification Using HIA Screening Criteria

After the passage of the Health Commission Resolution requesting a Health Impact Assessment (HIA) focused on SROs, the SFDPH team tasked with leading the HIA began work to identify a policy that could benefit from this process. Stakeholder engagement techniques and the criteria-based Screening step of HIA were used to identify potential policy or programmatic solutions to address the myriad social and environmental issues that impact the health of SRO residents. To assess the range of issues related to SROs and ideas for addressing these problems, SFDPH staff conducted 22 key informant interviews between October 2013 and January 2014. One-hour long interviews were conducted with informants affiliated with SFDPH, other City agencies, non-profit providers, SRO tenant advocacy collaboratives, and a business working with private SROs (refer to Table 2 for affiliated organizations included in interviews). Interviews were conducted by two to three SFDPH staff, with one staff member leading the conversation while other staff took notes.

Table 2: Organizations interviewed during key informant interviews (number of interviews, n=22)

Department of Public Health
• San Francisco Department of Public Health (5)
Other City Agencies
• Office of Mayor Edwin Lee (1) • San Francisco Department of Building Inspection (1) • San Francisco Department of the Environment (1) • San Francisco Human Services Agency (2) • San Francisco Office of Economic and Workforce Development (1) • San Francisco Public Utilities Commission (1)
Non-profit Groups and SRO Collaboratives
• Cadillac Hotel (1) • Central City SRO Collaborative (1) • Chinatown SRO Collaborative (1) • Episcopal Community Services San Francisco(1)

• Harm Reduction Center (1) • Mission SRO Collaborative (1) • Tenderloin Housing Clinic (1) • Tenderloin Neighborhood Development Corporation (1) • Urban Solutions (1)
Private SROs
• Private SRO building contractor (1)

Interview notes were coded using MaxQDA qualitative analysis software to extract themes from these interviews. From the analysis, the problems and solutions interviewees mentioned were broadly grouped into five themes with more specific subthemes:

1) Building Conditions
- a) Owner Negligence
- b) Tenant Behaviors
- c) Regulatory Coordination
- d) Management Incentives & Support
- e) Outdated Housing
- f) Accessibility
- g) Violence
- h) Management-Tenant Relationships

2) Supportive Services
- a) Case Management
- b) Social Interaction
- c) Successful Movement through System
- d) Tenant Empowerment
- e) Negative Feedback Loop

3) Housing Fit
- a) Housing Matched to Ability
- b) Housing for Each Step in Stabilization
- c) Assessment of Housing Needs
- d) Family Housing
- e) Housing as Healthcare

4) Real Estate Pressures
- a) Tenant Protections
- b) Unaffordable Rent
- c) Supportive Housing Growth
- d) Hotel Conversion Ordinance

5) Healthy Eating
- a) Cooking Facilities
- b) Nutrition and Cooking Education
- c) Food Access
- d) Building Community with Food

The content from the interviews was summarized into a report entitled *Improving Health in SROs Health Impact Assessment: Key Informant Interview Summary – February 2014*, which is attached in Appendix A.

The information gained through the key informant interviews was instrumental in organizing and facilitating the next step of the policy generation process, the stakeholder meetings. This report both provided a better understanding of the historical issues related to SROs and helped guide which stakeholders were invited to the larger meetings. Stakeholder meetings were designed to generate concrete policy or program ideas that could be examined using HIA tools. Three separate stakeholder meetings were held in order to best engage stakeholders who had a variety of unique perspectives and experiences: one for SFDPH staff that worked in housing, mental and physical health services, and housing inspection; one for non-profit SRO operators and non-governmental organizations that work with tenants and private SRO operators; and one for representatives of other City agencies that

interface with SROs, including Building Inspection, the Mayor's Office, Police, Human Services, and others. All stakeholders were provided with a copy of the report *Improving Health in SROs Health Impact Assessment: Key Informant Interview Summary* prior to the meetings.

Each meeting began with an overview of the HIA process before moving into group policy brainstorming. After thinking about policy and program opportunities as a group, the meetings ended by asking participants to fill out a screening matrix with their top one to three policy suggestions and answer the following 12 questions about each policy:

1. *Is there a policy decision making process that is clear, and that may be open to HIA findings?*
2. *Are there documented public concerns about such a policy (or lack thereof)?*
3. *How might understanding the potential health effects of the policy add value to the consideration of this policy?*
4. *How will this policy impact vulnerable populations?*
5. *What are the health concerns or health determinants that the policy could address?*
6. *Who are the stakeholders and interest groups that would be interested in this policy?*
7. *What are some challenges to the consideration of this policy that you might anticipate?*
8. *Are there external time constraints that should be considered in selecting this policy for the focus of an HIA?*
9. *Are there non-health related co-benefits of the policy (e.g., to the environment, economics)?*
10. *Has this policy been considered before in San Francisco? Or been considered or implemented in another jurisdiction?*
11. *Are there existing data sources to do the HIA?*
12. *Based on your responses, would you recommend this policy be considered as part of the HIA?*

The information collected in the screening matrices was entered into a master matrix for each group. Answers to the 12 questions were used to rate each policy for its suitability as a topic for HIA. In cases where participants did not answer some of the questions, additional research was conducted to assess how strongly that policy would rate for that question. Refer to Appendix B for descriptions of the top five policies decided upon from each stakeholder meeting.

The policies that were selected for further examination using HIA were: 1) An ordinance amending the San Francisco Health Code (Article 11, Sec. 594 - 609.2), which would define a SRO as a distinct entity from residential apartments and tourist hotels and either a) require SRO operator education on compliance with Health, Housing, and Fire Codes as a condition for the Certification of Sanitation, and/or b) make SRO operator education a requirement for financial incentive programs for SRO owners to improve their properties; 2) an ordinance amending the San Francisco Administrative Code (Chapter 41.10) to require SRO operators to report data on structural elements of the building as part of the required SRO Annual Unit Usage Report submitted to the Department of Building Inspection (DBI); and 3) SFDPH's engagement in a coordinated data system with DBI and use of enhanced inspection analytics to improve targeted enforcement. These policy components were chosen above other suggestions for a number of reasons, including their feasibility to be implemented with little additional staffing, their likeliness to impact all SROs, and their basis being on previous concrete proposals.

The process for arriving at these policies took over six months due to high level interest in this project, the need to convene diverse and busy stakeholders, and the need to be sensitive to high profile SRO hearings that were taking place outside of the context of the HIA. For example, on May 12th 2014 City Attorney Dennis Herrera sued prominent SRO owners and operators in San Francisco, for "pervasive violations of state and local laws intended to protect residents' health, safety and tenancy rights."[x] A number of rooms in the facilities operated by the defendants were contracted for transitional housing by the City, which obligates the provision of "clean, safe, and habitable conditions for tenants." A few months later, another lawsuit was filed by the City Attorney against a well-known contractor for "an array of unlawful business practices that includes obtaining permits for work illegally performed by unlicensed contractors, and for exposing residents and workers to the carcinogen asbestos and, in one instance, lead."[xi] At the same time, discussions around chronic elevator problems in SROs had also gained momentum and hearings were being held with the Board of Supervisors.[xii] While the political sensitivity of these issues necessitated that the HIA process momentarily slow down, these high profile cases further supported the timeliness of an HIA focusing on violations of basic housing and health code.

The policy that proposed a definition for SROs and specified requirements for SRO operators, as presented in Section One, was refined by examining other jurisdictions' SRO regulations, reviewing previous policy work around SROs in San Francisco, and consulting the key stakeholders. The initial policy proposed to "permit" SROs in a similar manner to restaurants or massage establishments. However, it became clear through conversations with stakeholders that a permitting system may not lead to a desirable outcome because residents would have nowhere else to go if a SRO was shut down for repeated serious violations due to the lack of affordable housing in the city. At the same time, the training component of the policy, similar to what is often provided through SFDPH's Environmental Health Food Program, continued to get support.

A review of legislative processes dating back to February 2005 revealed that in 2006, the City's SRO Task Force had unanimously supported a proposed requirement that property managers who have chronic environmental health violations must attend code-enforcement training. This provision was included in the Neighborhood Sanitation and Housing Habitability Ordinance introduced by then Supervisors Mirkarimi and Peskin. However, SRO Task Force support for the ordinance was withdrawn later that year because the Task Force had initially voted to support the issue without giving sufficient public notice of the vote. The ordinance subsequently became inactive. Dr. Johnson Ojo, the manager of the SFDPH Hotel Inspection Program at the time, reflected that while the ordinance did not move forward, he had provided trainings to operators in the past and felt that they had been valuable and well received. Other stakeholders that work to support SRO operators likewise mentioned that they thought that a training, aiming to clarify applicable codes for SROs and to provide information and resources on best practices, would be desired by many SRO operators. Thus the permitting component of the policy was dropped and the operator training was elevated. The data collection and analytics components of the housing data and data analytics policy remained mostly unchanged.

SECTION THREE - SCOPING

After an extensive policy generation and Screening process, the HIA moved into the Scoping stage. To engage stakeholders in this step, two meetings were held – one with staff from SFDPH, including multiple representatives from Environmental Health and branches that provide housing and homeless services, and another meeting with representatives from the City Administrator's Office, Department of Environment, and a law firm that frequently represents SRO tenants. Due to time constraints, each group either focused on the operator education or the data collection and analytics components. The main objective of these meetings was to begin forming draft scoping diagrams that would inform which health outcomes would be the focus of the HIA and the research techniques that would be used to make projections for the potential impacts of the policies.

A modified version of UCLA's HIA Screening/Scoping Checklist was used, which allowed users to rate the likelihood and magnitude of impact that a policy might have on an array of health determinants and outcomes. Refer to Appendix C for aversion of revised checklist used. The SFDPH group spent their 90 minute session focusing on the operator education given their historical expertise with the subject. The group session went through each item on the checklist and came to a rating consensus. While this approach allowed the group to weigh in on a variety of potential impacts, it did not facilitate a high level of engagement among participants. For the next group, a less structured approach was used to solicit ideas about potential high ranking impacts. This approach led to a much livelier discussion and was better suited for the smaller group that was present at the second meeting.

Based, in part, on the ideas generated at these meetings, scoping diagrams were created for each potential policy (refer to Figures 1 and 2).

Figure 1. Scoping Diagram for SRO Operator Training

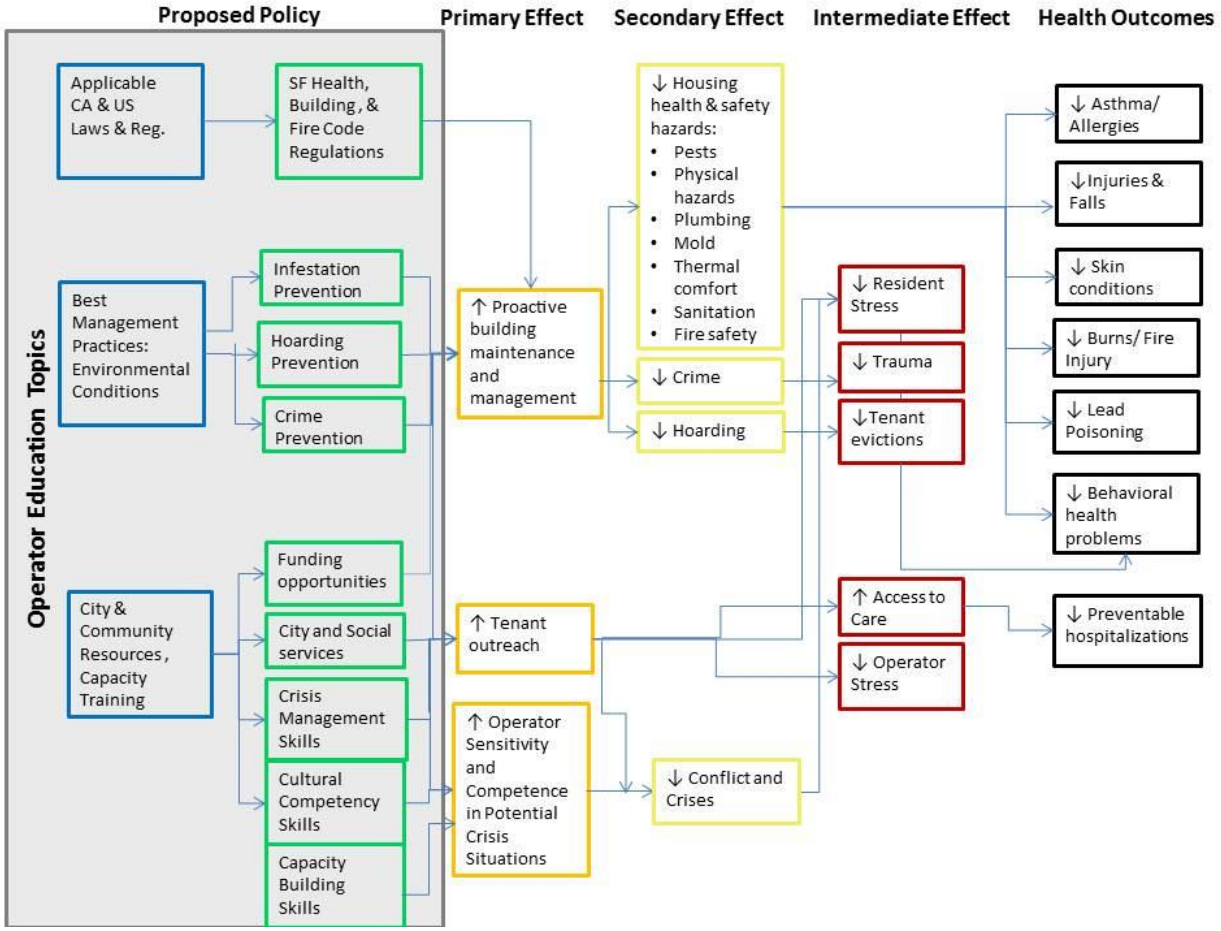
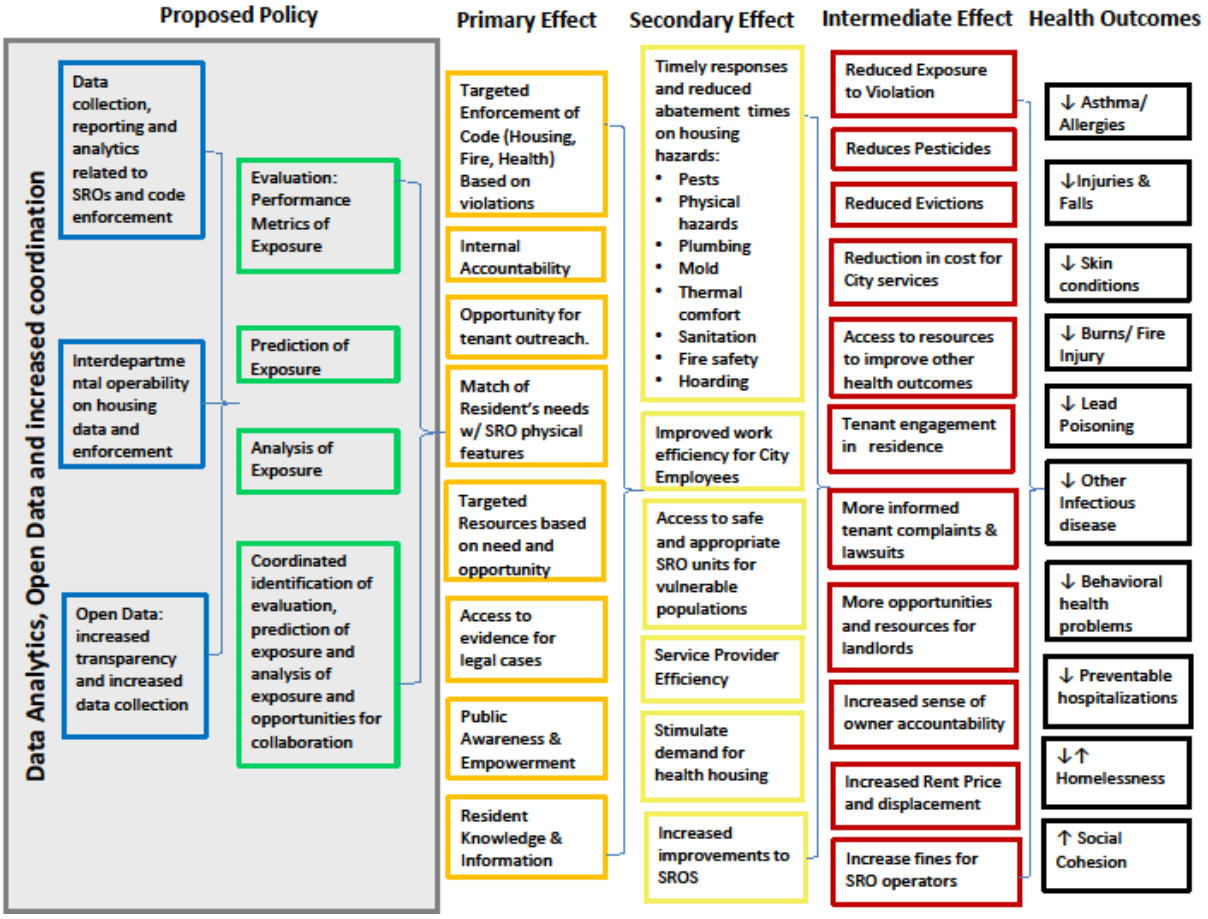


Figure 1 illustrates the impacts that operator training are projected to have on SRO resident health. The diagram assumes that increased education about applicable codes and resources related to best practices to adhere to these codes will increase compliance with the law. While there are distinctions between the codes enforced by DBI, Fire, and SFDPH, they are projected to result in overlapping health outcomes, if the codes are complied with or disregarded. For example, lack of compliance with electrical codes (Housing Code) to support proper food storage equipment, impacts food security among residents, as does improper control of vector infestations (Health Code) when resident food becomes contaminated.

Figure 2. Scoping Diagram for Housing Data and Data Analytics



The scoping diagram in Figure 2 explores the impacts that improved data collection, transparency, and analysis could have when used internally by City agencies and externally by the public. In each case, better data use could improve understanding of the level of exposure residents have to unhealthy housing conditions and support the development of performance measures related to the timeliness with which exposures are addressed and mitigated. More sophisticated uses of this data could also support predictive analytics, such that inspections and other resources could be better targeted to address housing issues and health concerns. The grey bar represents the necessity for a data sharing platform that provides internal and external users timely and efficient access to this data. From there, there is a number of mediating impacts or use cases for the data. These mediating impacts range from improving internal program accountability to increasing resident outreach to providing greater legal evidence in SRO habitability cases. As a result of these actions, these changes could have short term impacts like more timely reporting of and response to violations, increased efficiency of code enforcement programs, and improvements to buildings. Based on these impacts, exposures to negative environmental conditions such as pests, cold temperatures, and poorly maintained refuse could decrease. At the same time, increased displacement could take place if SRO operators were to raise rents as a result of passing on the costs of building repairs to residents. This possibility, however, could

be counterbalanced by the increased availability of data for tenant advocates to use to support the enforcement of tenant rights. The health outcomes from the housing data and data analytics policy, similar to those from operator education, include decreases in infectious disease, injuries from falls, and respiratory illnesses, while mental health and wellbeing could increase if living conditions improve.

SECTION FOUR – ASSESSMENT

Methods

This HIA employed mixed research methods to assess three areas of consideration prioritized by the research questions. Specific methods included:

Quantitative Data. Data on various aspects of SROs, demographics and neighborhoods conditions, housing inspections and violations, and neighborhood health status were gathered from The San Francisco Department of Building Inspections (DBI), The San Francisco Planning Department (SF Planning Department), The San Francisco Department of Public Health, the 2010 Census, and the California Statewide Health Planning and Development: Public Patient Discharge Data, 2010-2012. While it was not possible to measure the health outcomes of SRO residents specifically, hospitalization and emergency room (ER) admission rates were calculated in the six zip codes that contain the majority (88%) of the SRO rooms in San Francisco. To understand the demographics and neighborhood conditions of SROs, geographic information systems (GIS) software was used to examine the distribution of SROs throughout the City as well as the distribution of community assets and deficiencies relative toSROs. This quantitative data is represented in the Existing Conditions section.

Focus Groups and Key Stakeholders Interviews. In order to gather evidence on the potential effectiveness of an operator training, focus groups were held with SRO operators to understand operators' knowledge, attitudes, and behaviors associated with SRO conditions and the tenants' health. Participants were selected if they had an active role on property maintenance and management. The focus groups concentrated on three categories: housing codes and enforcement, health and housing and trainings. In addition to focus groups, key informant interviews were conducted to prepare for the focus groups and augment findings. Since the participants of the focus groups were all employed by property management companies, interviews with two SRO managers not related to a property management group were also conducted.

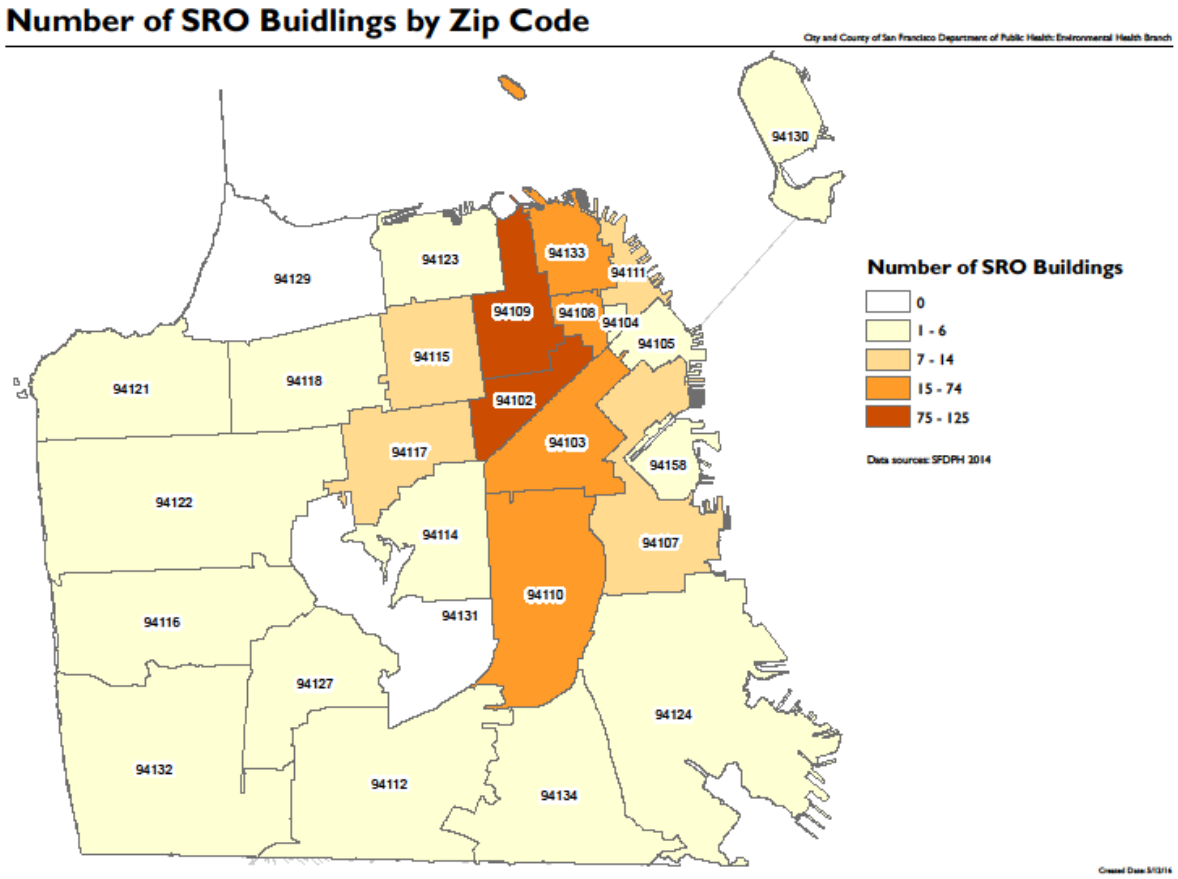
Literature Review. Information about the relationship between housing and health was gathered from peer-reviewed journals, The Centers for Disease Control and Prevention, King County Department of Public Health, Massachusetts Executive Office of Health and Human Services, The New York State Department of Public Health and the Center for Healthy Housing. This information can be found in Appendix D. An analysis of case studies was conducted to understand the effectiveness of advanced data analytics for code enforcement by local governments. The analysis identified multiple challenges and best practices for implementing such projects.

Existing Conditions

SRO Facilities

There are approximately 581 SRO buildings in San Francisco (DBI, Planning 2014), of which 85 (15%) receive public funding or services through the city, with the remainder privately owned. Publicly funded buildings account for 24% of the city's SRO units (5,539/22,769). Refer to Figure 3 for map of the City for the locations of SRO buildings, by Zip Code.

Figure 3: Number of SRO Buildings by Zip Code



The majority of SRO buildings were built in San Francisco in the years immediately following the 1906 San Francisco earthquake. Forty-seven percent of identified SRO buildings were constructed within 5 years of 1906, while 61 percent were constructed within 7 years of the earthquake with the median year of construction being 1909 (refer to Figure 4). SROs tend to be older than the housing stock of San Francisco, where the median year of construction is 1927. As expected, SRO rooms/units show a similar trend with the majority constructed immediately after the 1906 earthquake(refer to Figure5).

Figure 4. Construction Date of SRO Buildings

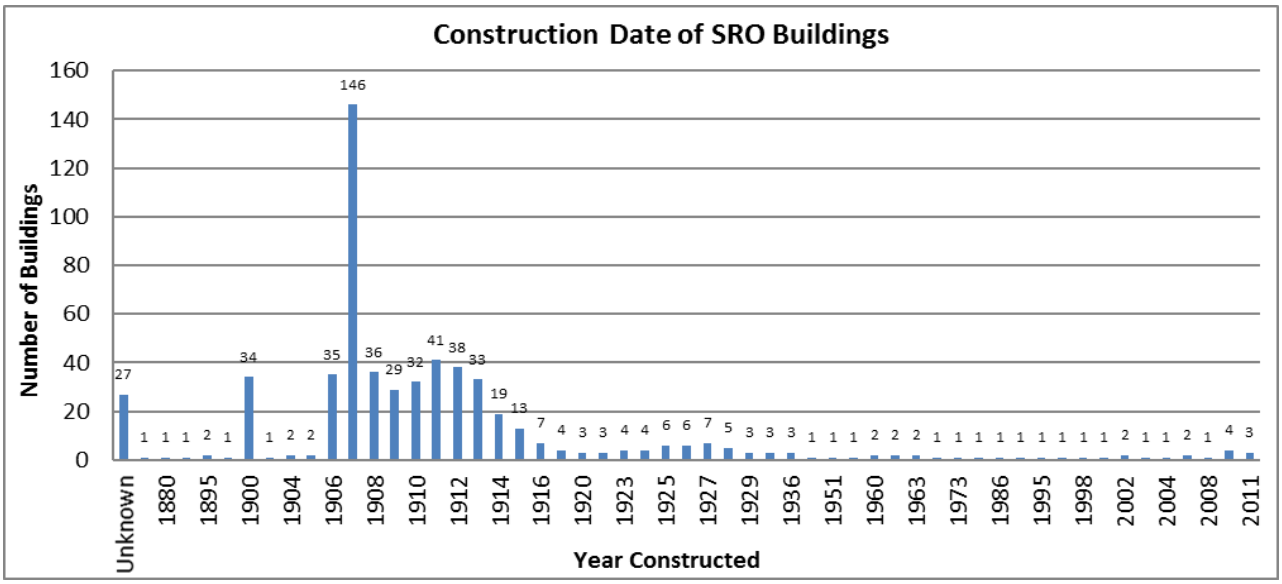
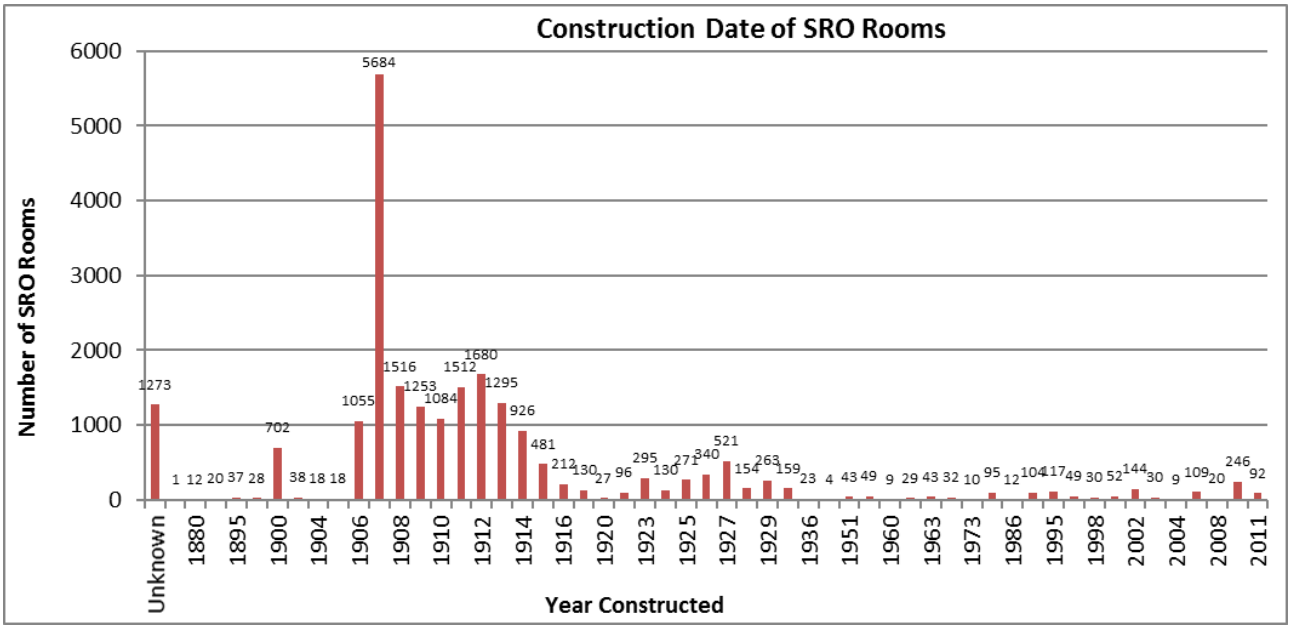


Figure 5. Construction Date of SRO Rooms



Source: Assessor's Office, 2014

SRO Violations and Associated Health Outcomes

SRO violation patterns were analyzed using data from 2008 to 2012 using from SFDPH, DBI, and San Francisco Fire Department (Fire Department).

Between the years of 2008 to 2012, most inspections and violations in the dataset were issued by SFDPH (Table 3-4). The distinct difference in the number of inspections and violations between the three agencies is currently being explored. Potential reasons for the differences could include differential

categorization of the same buildings by the three different agencies and SFDPH inspectors generating individual inspection and violation records for individual rooms within a single building versus more building-specific reporting by DBI or Fire Department records.

Table 3. Total number of Health, Building, and Fire Inspections at SROs, 2008-2012

Inspection Agency	Frequency	Percent
Building	204	3%
Fire	304	4%
Health	6,984	93%
Total	7,492	100%

Source: DBI, Fire, SFDPH

Table 4. Total number of Health, Housing, and Fire Code Violations in SROs, 2008-2012

Inspection Agency	Frequency	Percent
Building	255	9%
Fire	207	7%
Health	2,445	84%
Total	2,907	100%

Source: DBI, Fire, SFDPH

Figures 6-7 show the distribution of inspections and violations amongst SRO buildings between 2008 and 2012. Using the currently available data, approximately half of SROs were given 1 to 10 inspections over the previous 5 years (53%) and received 1 to 10 violations (51%) by SFDPH, DBI, or Fire. However, about one-third of SROs received no violations and 11% did not have a recorded inspection. During that period, 34 hotels received more than 20 violations.

Figure 7. Number of Health, Health and Fire Code Inspections at SROs, 2008-2012

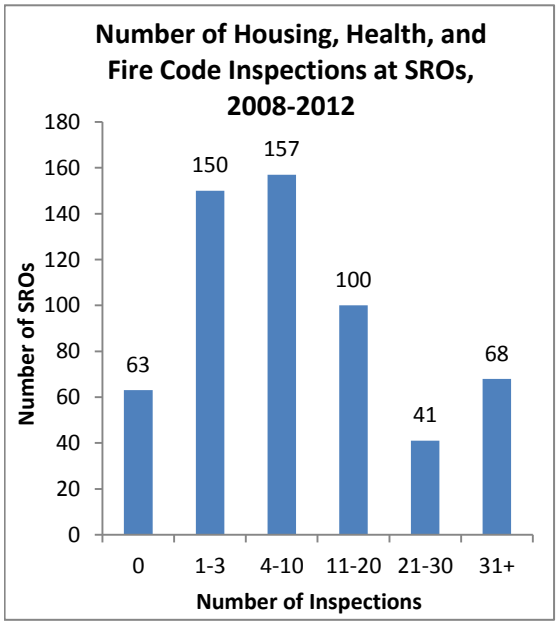
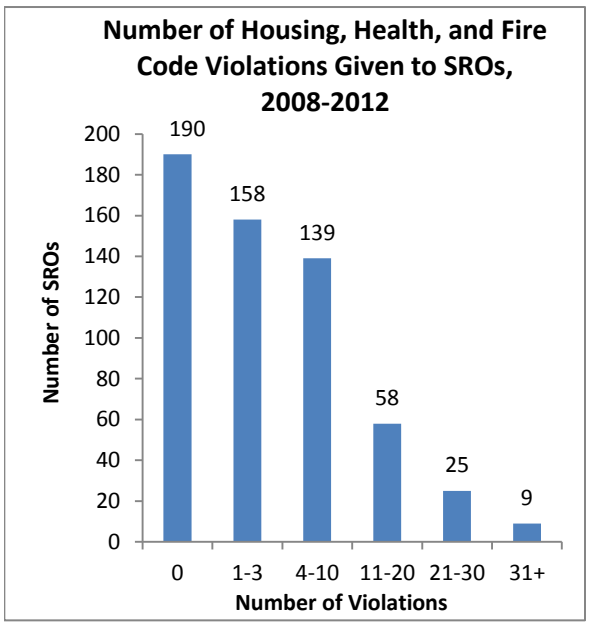


Figure 6. Number of Health, Health and Fire Code Violations at SROs, 2008-2012



An analysis of thegeographic distribution of inspections and violations (Figures 8-9) in zip codes that contain 88% of the City's SROs (94102, 94103, 94108, 94109, 94110, and 94133) showed that zip code 94108, which encompasses much of Chinatown, had the highest percentage of SROs receiving zero inspections (23%, N=14) and zero violations (42%, N=26). Conversely, zip code 94103, which

encompasses South of Market, had the highest percentage of buildings receiving 31 or more inspections (34%, N=25) and 31 or more violations (8%, N=6).

When examined by the funding status of the SRO buildings, 90% (N=447) of private SROs received at least one inspection between 2008 and 2012 and 84% (N=71) of publically funded SROs received at least one inspection. However, nearly one third of the public SROs (N=25) received 31 or more inspections over the five years. This results in 26% (N=1,934) of inspection records being for publically funded SROs, even though they comprise 15% of the SRO stock. In the case of both public and private SRO buildings, about 30% received no violations over the five years. However, among private SRO buildings that received violations, it was most common for them to receive 1-5 violations (42%, N=208), while violation counts in public SROs were roughly equally spread between 1-5, 6-10, 11-20, and 21-30 violations, with between 15% and 18% (N=13-15) ineach grouping.

Figure 8. SRO Health and Housing Inspection Count, by zip code, 2008-2012

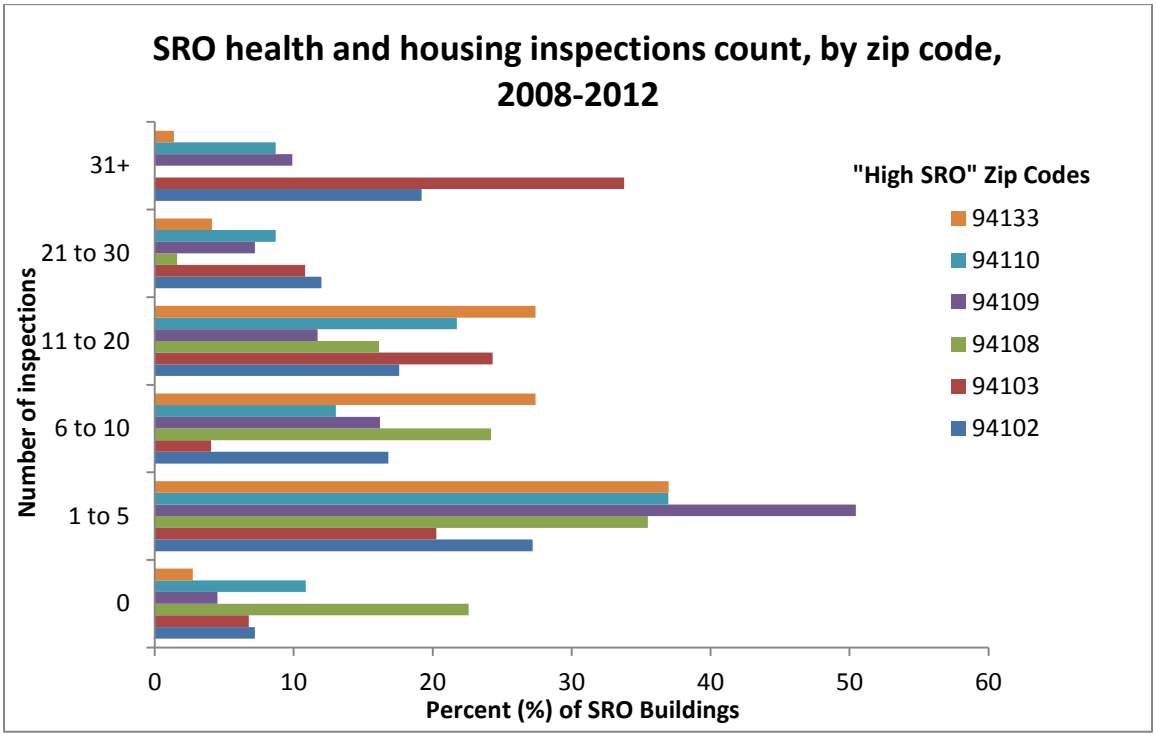
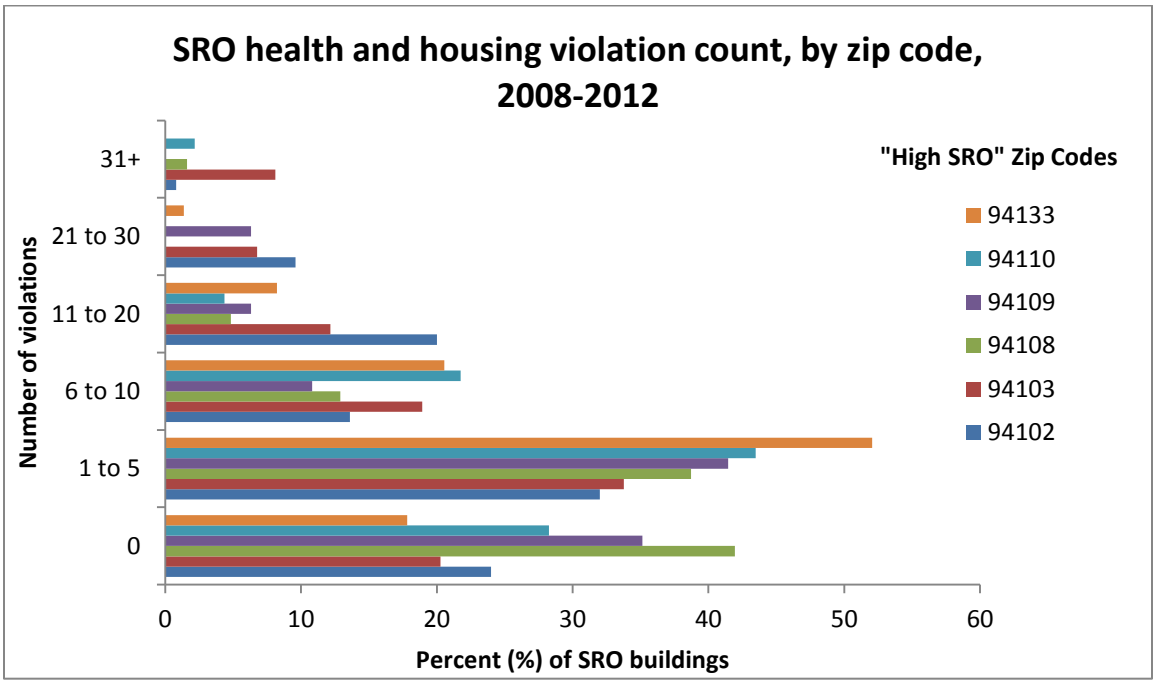


Figure 9. SRO Health and Housing Violation Count, by zip code, 2008-2012



To gain a clearer idea of the most common types of issues being cited, violations were categorized based on violation type. Violation types "General Maintenance – DBI," "Other Building/Housing Violation – DBI," and "Unsanitary Conditions, not Specified – SFDPH," violations were re-coded, in part, using field notes. In some cases, the violation notes indicated multiple code infractions, and thus the violation was included in multiple categories. Table 5 below summarizes the number of times the top violation categories were observed. This table total exceeds the number of total violations during the time period due to some violations being coded into more than one category.

Due to the high number of violations issued by SFDPH relative to DBI and Fire, the most common violations are those that SFDPH has authority over. Table 5 shows that the most commonly cited issue was animal and pest infestations, followed by mold, improper storage and maintenance of garbage, and general sanitation issues such as dirty surfaces. Another commonly cited issue was building structural problems, including distressed flooring, broken windows and doors, and cracked walls and ceilings – which commonly lead to pest and moisture intrusion. Other commonly noted problems were hoarding and cluttering, plumbing issues, and chipping paint. Less commonly cited were missing or non-functional fire alarms, issues related to improper ventilation and thermal control of living spaces, and obstruction of pathways to building exits.

Table 5.Number of times different code violation categories were observed in SROs, 2008-2012

Final Category	Count Observations	Percentage of Total Observations
TOTAL	**3,123**	**100%**
ANIMAL/PEST	992	31.8%
MOLD	300	9.6%
REFUSE	279	8.9%
SANITATION	232	7.4%
STRUCTURE	192	6.1%
SANITATION – NOS	171	5.5%
HOARDING	130	4.2%
ROUTINE	117	3.7%
PLUMBING	114	3.7%
CHIPPING PAINT/LEAD	97	3.1%
FIRE – ALARM	70	2.2%
VENTILATION	68	2.2%
FIRE – NOS	37	1.2%
FIRE – RECORD/PERMIT	36	1.2%
EGRESS OBSTRUCTION	36	1.2%

Notes:Fire – NOS refers to issues cited by the Fire Department that did not have a clear description, and Fire – Record/Permit includes lack of or expired permits for fire safety equipment or safety plans. Sanitation NOS – refers to violations that were coded as Unsanitary Conditions – Not Specified that did not have notes allowing for more refined coding of the violation issues.
Source: DBI, Fire, SFDPH

Table 6 provides examples of violations within some of the top violation categories and lists some of the established health outcomes associated with these environmental conditions. Some of the most common potential health outcomes from the listed violations include: respiratory illness, gastrointestinal illness, injuries from trips and falls, and mental illness.

Table 6. Example Violations and Possible Health Outcomes

Violation Category	Violation Category Examples	Possible Health Outcomes
Animals and Pests	Cockroaches; rats; mice; bedbugs; raccoons	• Cockroaches - mental health (from odor); gastrointestinal illness; respiratory illness; asthma trigger.[1] • Rodents - asthma trigger, hantavirus and other diseases.[1] • Bedbugs - itching and loss of sleep; secondary skin infection because of scratching.[2] • Raccoons - rabies; raccoon roundworm; Leptospirosis.[3]
Mold	Mold/mildew on ceilings, walls, carpets, or other surfaces	• Mold – asthma trigger; skin rashes, fatigue, dizziness, flu-like symptoms, nausea, respiratory and eye irritation, immuno-suppression, birth defects, lung inflammation, and cancer have been associated with exposure to mycotoxins; fungal pneumonia in persons with

		compromised immune system.[1]
Refuse	Refuse accumulation; dumping; spoiled food	• Health outcomes associated with cockroaches, rodents, and raccoons.[1,3] • Quality of life issues associated with smell and clutter.[4]
Sanitation	Soiled surfaces; unpleasant odors	• Due to the fact that most SROs have communal bathrooms, exposure to bacteria and viruses transmitted through feces is a real hazard. The following diseases can be contracted through fecal-oral transmission: Hepatitis A, Shigellosis, Cryptosporidiosis, Norovirus, E. coli, and others. • People who smell strong odors may get headaches or feel dizzy or nauseous. If an odor lasts a long time or keeps occurring, it also could affect mood, anxiety and stress level.[4]
Building Structure	Water or moisture intrusion; damaged or dilapidated ceilings, floors, floors, windows, or doors	• Moisture intrusion - can lead to mold (see health effects above) • Structural hazards - injuries including trips, falls, burns, and cuts/scrapes (source: CDC/Krieger, 2002)
Hoarding	Accumulation of possessions that are useless and that interfere with the ability to function	• Falls or accidents and inability of emergency personnel to enter or remove an ill person. • Clutter, garbage, animal or human feces and resulting mold or infestation can also cause respiratory and other health problems. • Lack of sanitation can be particularly unsafe for immunocompromised individuals. • Ammonia levels from accumulations of urine and feces can easily exceed maximum occupational exposure limits, and can be harmful to persons with cardiac or respiratory dysfunction.[5]
Plumbing	Leaking pipes, lack of running water, lack of hot or cold water, non-functioning toilets or showers	• Excessive moisture from leaking pipes can cause or contribute to mold, cockroaches, dust mites, and peeling lead paint.[1] • Lack of safe drinking water and absence of hot water for washing contribute to the spread of infectious diseases.[6]
Lead	Chipping or peeling paint	• There is a clear relationship between lead exposure (particularly in children) and neurodevelopmental abnormalities.[6]
Fire Hazards and Prevention	Non-functioning smoke detector; heat source near combustible material	• Increased risk of building fires, delayed warning from non-functioning alarm systems, impaired building egress for residents and impaired ingress for emergency responders.

Indoor Climate	Inadequate heat or ventilation	• Poorly functioning heating system - carbon monoxide poisoning; injury from exposed heating sources; fire from exposed heating sources; accumulation of dampness and mold from insufficient heating (refer to mold health effects).[6] • Insufficient cooling - heat stroke • Insufficient ventilation - Poor indoor air quality (pollution) can bother your eyes, nose, and throat. It can also lead to chronic heart and lung problems and cancer.[7]
Mental Health Good quality and stable housing has been positively correlated with psychological wellbeing. Housing type and housing quality have all been linked to mental health. Living in extremely poor conditions can cause social deprivation and hopelessness, which over extended periods of time can cause long term change in the immune system and brain .Unstable housing can cause a mental illness or exacerbate existing symptom that were previously manageable.		
Sources: 1. National Center for Healthy Housing. Health Hazards, Prevention, and Solutions. Retrieved from http://www.nchh.org/What-We-Do/Health-Hazards--Prevention--and-Solutions.aspx. 2. Centers for Disease Control and Prevention. Bed Bug FAQs. Retrieved from http://www.cdc.gov/parasites/bedbugs/faqs.html. 3. Public Health – Seattle and King County. Diseases from raccoons and other wildlife. Retrieved from http://www.kingcounty.gov/healthservices/health/ehs/zoonotics/raccoons.aspx. 4. New York State Department of Health. Odors & Health. Retrieved from https://www.health.ny.gov/publications/6500/index.htm. 5. Massachusetts Executive Office of Health and Human Services. Risks Caused by Hoarding. Retrieved from http://www.mass.gov/eohhs/consumer/behavioral-health/hoarding/risks-caused-by-hoarding.html. 6. Krieger, J., & Higgins, D. L. (2002). Housing and health: time again for public health action. *American Journal of Public Health*, 92(5), 758-768. 7. Centers for Disease Control and Prevention. Air Pollution and Respiratory Health – Indoor Air Quality. Retrieved from http://www.cdc.gov/nceh/airpollution/airquality/.		

SRO Population Demographics and Neighborhood Conditions

While it is difficult to ascertain an accurate demographic profile of SRO tenants, a 2009 assessment of SRO residents for the San Francisco Human Services Agency (HSA) found that among SRO residents that were clients of 10 human service programs:

- Males comprised 61% of SRO residents.
- The average age of SRO residents was 55, with the majority of residents being over 25 years of age. Most male tenants were between 45-65 years, while female tenants were more evenly spread across age groups, with a larger percentage being over 70 years old compared to male tenants.
- Forty-six percent of SRO residents were Asian/Pacific Islander, 24% were White, 18% were African-American, and 7% were Latino.
- English was the primary language of more than half of these SRO residents while Chinese was the primary language of around one-third.

- Younger SRO residents (under 18 years old) were mostly Asian/Pacific Islander and Latino. The API population also had the highest proportion of seniors living in SROs.

While the 2009 HSA assessment is informative, the HIA also examined census data in census tracts with a high proportion of SROs for cross referencing.

2010 Census data was used to determine the demographic profile of areas with a high concentration of SRO rooms. The analysis of the 2010 Census population living in census blocks, where 50% or more of the housing units were estimated to be SRO rooms, found a profile similar to the HSA analysis. Males comprised roughly 60% of the population in the SRO predominant blocks, over 40% of residents were Asian or Pacific Islander, and a quarter where white alone; however, slightly fewer were African American (12% vs. 18%) and slightly more were Latino (14% vs. 7%). The age distributions were also similar between the census and HSA data, with majority larger percentage of male tenants being between 45-65 and a higher percentage of female tenants being over the age of 65. When compared to the City as a whole, the SRO predominant blocks have a higher percentage of Asian/Pacific Islander and African American residents and a lower percentage of white residents. Residents also tend to be older (45 years+) and male, compared to all San Franciscans. Refer to Table 7 for a summary of the analysis of demographic characteristics.

Table 7. Demographic characteristics of census blocks where SRO rooms make up 50% or more of residential units, 2010

Demographics	50% SROs	%	Citywide	%
Total Population	28,494	-	805,235	-
Race				
Not Hispanic or Latino	24,404	85.6%	683,461	84.9%
White alone	7,766	27.3%	337,451	41.9%
Black or African American alone	3,410	12.0%	46,781	5.8%
American Indian and Alaska Native alone	181	0.6%	1,828	0.2%
Asian alone	12,028	42.2%	265,700	33.0%
Native Hawaiian and Other Pacific Islander alone	116	0.4%	3,128	0.4%
Some Other Race alone	97	0.3%	2,494	0.3%
Two or More Races	806	2.8%	26,079	3.2%
Hispanic or Latino	4,090	14.4%	121,774	15.1%
Male				
Overall	16,940	59%	408,462	51%
Under 18	1,228	7.2%	54,757	13.4%
18 to 24	1,135	6.7%	37,296	9.1%
25 to 44	4,802	28.3%	158,699	38.9%
45 to 64	6,826	40.3%	109,972	26.9%
65 and over	2,949	17.4%	47,738	11.7%
Female				
Overall	11,554	41%	396,773	49%
Under 18	1,146	9.9%	52,767	13.3%

18 to 24	948	8.2%	40,368	10.2%
25 to 44	3,142	27.2%	143,103	36.1%
45 to 64	3,664	31.7%	98,431	24.8%
65 and over	2,654	23.0%	62,104	15.7%
Total				
under 18	2,374	8.3%	107,524	13.4%
18 to 24	2,083	7.3%	77,664	9.6%
25 to 44	7,944	27.9%	301,802	37.5%
45 to 64	10,490	36.8%	208,403	25.9%
65 and over	5,603	19.7%	109,842	13.6%
Source: US Census				

When 2009-2013 American Community Survey data were examined for the zip codes that contain 88% of SRO rooms (94102, 94103, 94108, 94109, 94110, and 94133) the following trends were observed:

- Most SRO rooms are in 94102 (22%) and 94109 (18%)
- Zip codes 94102 and 94013 are comprised of more men (58% of residents) and African Americans (11-13% of residents) compared to the other high SRO zip codes.
- All zip codes have a smaller percent of residents that are between 0-19 years (8-11% vs. 15% for the City as a whole).
- Zip codes 94108 and 94133 have a higher percentage of resident that are 75 years or older (11-12%) compared to the City as a whole (7%).
- Zip codes 94108 and 94133 are predominantly Asian (53-60% of residents).
- Estimated median household income was the lowest in 94102 and 94108 ($22k and $35k respectively) compared to the City ($75k).

Geographic information systems (GIS) software was used to examine the distribution of SROs throughout the City as well as the distribution of community assets and deficiencies relative to SROs. Table 8 below summarizes the conditions around SROs compared to the City as a whole (refer to Appendix E for maps of neighborhood characteristics surrounding SROs).

Table 8. Environmental conditions near SRO hotels, San Francisco, CA

Area		
	Total	Percent
Total square miles within 1/4-mile of a SRO	14	29.8%
Total square miles citywide	47	100.0%
Total Population (2010)[1]		
	Total	Percent
Total population within 1/4-mile of SRO centroid	401,579	49.9%
Total population citywide	805,235	100.0%
Average Population Density (2010)[1]		
Avg. population density within quarter mile of an SRO (14 sq. miles)	28,684	per sq. mile
Avg. population density citywide (47 sq. miles)	17,133	per sq. mile
Youth Population (2010)[1]		
	Total	Percent
Total youth population within 1/4-mile of SRO centroid	43,072	40.1%

Total youth population citywide	107,524	100.0%
Average Youth (0-17y) Population Density (2010)[1]		
Avg. youth population density within quarter mile of an SRO (14 sq. miles)	3,077	per sq. mile
Avg. youth population density citywide (47 sq. miles)	2,288	per sq. mile
Senior Population (2010 - Residential Lots Estimate)[1]		
	Total	Percent
Total senior population within 1/4-mile of SRO centroid	54,868	50.0%
Total senior population citywide	109,842	100.0%
Average Senior (65+ Y) Population Density (2010)[1]		
Avg. senior population density within quarter mile of an SRO (14 sq. miles)	3,919	per sq. mile
Avg. senior population density citywide (47 sq. miles)	2,337	per sq. mile
Number of Off-Sale Alcohol Outlets[2]		
	Total	Percent
Total number of outlets within a quarter mile of an SRO	549	66.7%
Total number of outlets citywide	823	100.0%
Average Density Of Off-Sale Alcohol Outlets[2]		
Avg. density within quarter mile of an SRO (14 sq. miles)	39	per sq. mile
Avg. density citywide (47 sq. miles)	18	per sq. mile
Pedestrian-Vehicle Injuries (2005-2011)[3]		
	Total	Percent
Total number of pedestrian-vehicle injuries within a quarter mile of an SRO	3,744	68.7%
Total number of pedestrian-vehicle injuries citywide	5,452	100.0%
Average Density Of Pedestrian Vehicle Injuires (2005-2011)[3]		
Avg. density of pedestrian-vehicle collisions within quarter mile of an SRO (14 sq. miles)	267	per sq. mile
Avg. density of pedestrian-vehicle collisions citywide (47 sq. miles)	116	per sq. mile
Reported Crime (2012)[4]		
	Total	Percent
Total number of crimes reported within a quarter mile of an SRO	84,366	68.4%
Total number of crimes reported citywide	123,273	100.0%
Density Of Reported Crimes (2012)[4]		
Avg. density of reported crimes within quarter mile of an SRO (14 sq. miles)	6,026	per sq. mile
Avg. density of reported crimes citywide (47 sq. miles)	2,623	per sq. mile
Public Health Facilities[5]		
	Total	Percent
Total number of public health facilities within a quarter mile of an SRO	59	75.6%
Total number of public health facilities citywide	78	100.0%
Average Density Of Public Health Facilities[5]		
Avg. density of public health facilities within quarter mile of an SRO (14 sq. miles)	4	per sq. mile
Avg. density of public health facilities citywide (47 sq. miles)	2	per sq. mile
SEVERELY RENT BURDEN (2005-2009) - 50% Of More Of Income		
Avg. percent of households that are severely rent burdened in census tracts with SROs	22.6%	

Avg. percent of households that are severely rent burdened citywide	12.8%	
Food Access Score (2011)		
Avg. food access score SROs	88	
Avg. food access score citywide	56	

Sources: 1. 2010 Census
2. Location of Alcohol Outlets from California Department of Alcohol Beverage Control (ABC), downloaded October of 2011
3. California Highway Patrol, Statewide Integrated Traffic Records System (SWITRS) for 2005-2011
4. San Francisco Police Department, Accessible at: https://data.sfgov.org 2012)
5. CA Office of Statewide Health Planning and Development, Healthcare Facilities Listings. San Francisco Department of Public Health, Community Health Network Centers (2012)
6. 2011 - Retail food establishments: Dun and Bradstreet, February 2011 - via Network for a Healthy California - GIS Map Viewer: http://www.cnngis.org/Farmers' Markets: San Francisco Department of Public Health (See http://www.sfindicatorproject.org/indicators/view/116)

The analysis comparing the environmental conditions around SROs to the conditions of the entire City foundthat 30% of the City's land area and 50% of the City's population is within ¼ mile of a SRO. Most striking, the analysis illustrates that the density of neighborhood challenges found in that quarter mile buffer of SROs is disproportionately higher when compared to the entire city. For example, 67% of the San Francisco's off-sale alcohol outlets (establishments where beer, wine, and liquor can be bought to be consumed off the premises) are within ¼ mile of an SRO, with an alcohol outlet density twice that of the City as a whole. The same is true for pedestrian injuries from vehicle collisions – 69% percent of all of these injuries happen within ¼ mile of an SRO and the density per square mile is more than twice as high as the City average. Likewise, the density of crimes reported to the San Francisco Police Department is also more than twice as high near SROs. Census tracts containing SROs have a much higher percentage of renting households that are spending 50% or more of their pay on rental costs.

While this data shows that environments around SROs are faced with numerous issues related to safety and affordability/low income, SROs are generally located in areas of the City with high access to certain infrastructure resources. The average food access score for SROs is 88 out of 100 while the citywide average is 56. This indicates that SROs are generally located in proximity to a variety of food resources, including supermarkets, small groceries produce shops, and meat markets. Similarly, 76% of the city's public health facilities are near SROs. However, it is important to note that proximity is not always a good indicator of access, as disposable income, time, mobility, living situations, and other issues constrain SRO residents' ability to take advantage of these resources.

Neighborhood Health Status

The specific health outcomes of SRO residents cannotbe measured directly. Therefore, SRO resident health was assessed by calculating hospitalization and emergency room (ER) admission rates for the six zip codes that contain the majority (88%) of SRO rooms in San Francisco. Table 9 below summarizes the analysis.

Table 9. Age-adjusted, annual average adult hospitalization and emergency room admission rates per 10,000 residents, in zip codes containing 88% of SRO rooms, 2010-2012

Hospitalization/ ER Rate, per 10,000	*City* *San Francisco*	94102 Tenderloin / Hayes Valley	94103 South of Market	94108 Chinatown	94109 Van Ness Corridor - Russian Hill to Tenderloin	94110 Mission	94133 Chinatown / North Beach
# of SRO Rooms	*22,769*	6,714	3,306	1,850	4,050	1,396	2,741
% of All SRO Rooms	*100%*	29%	15%	8%	18%	6%	12%
Preventable Hospitalizations	*67.2*	146.9	133.7	66.4	71.3	83.2	62.1
Adult Asthma	*5.5*	13.6	10.1	5.8	4.5	6.2	6.9
COPD*	*8.1*	24.8	23.3	10.0	9.9	8.1	9.4
Diabetes	*8.2*	15.5	16.0	6.4	7.9	13.9	6.4
Heart Failure	*18.7*	38.2	31.3	19.1	17.5	23.0	14.6
High Blood Pressure	*2.2*	4.7	4.5	1.4	2.8	2.5	1.6
Hepatitis C	*0.7*	1.5	1.9	0.6	0.7	1.0	0.6
Falls - Emergency Room	*3.1*	11.6	8.2	4.3	8.8	2.9	2.3
Self-Inflicted Injury - Emergency Room	*2.3*	8.0	6.9	0.8	4.4	5.3	1.9
Assault - Emergency Room	*43.8*	144.7	118.9	23.6	71.0	63.4	28.9

**COPD = Chronic Obstructive Pulmonary Disease*
Notes: Numbers in red indicate zip code has rate higher than City rate; numbers in green indicate zip code has rate lower than the overall City rate; numbers in yellow indicate zip code has rate comparable to the overall City rate
Source: California Office of Statewide Health Planning and Development, Public Patient Discharge Data, 2010-2012

Primary diagnoses categories were chosen based on their relationship to common SRO housing conditions. The first category examined was preventable hospitalizations. These are hospitalizations that are most likely could have been avoided if the patient had received proper outpatient care earlier, and include a list of diagnoses chosen by the Agency for Healthcare Research and Quality (AHRQ)[xiii]. They are not an indication of hospital performance, but rather the accessibility and quality of primary care

services for the community and to some extent, the health of the individuals living in a community. When examining preventable hospitalization rates for these zip codes compared to the City as a whole, 94102 and 94103, which house 44% of SRO rooms, have preventable hospitalization rates that are more than twice the City average. Zip code 94110 in the Mission (6% of SRO rooms) has a preventable hospitalization rate of 83.2 hospitalizations per 10,000 residents, moderately higher than the City average. However, zip codes 94109, 94108, and 94133 have rates on par with the City average. For the individual diagnoses categories, numbers in red indicate that the rate is at least 20% higher than the City average, while numbers in green indicate that the rate is at least 20% lower than the City average. Zip codes 94102 and 94103 have rates that are higher than the City in every category. Zip code 94108, which is primarily in Chinatown, also experiences moderately higher rates of chronic obstructive pulmonary disease (COPD) hospitalizations and ER admission rates for falls. Also in the Chinatown vicinity, 94133 shows lower rates in many categories, but a slightly elevated rate of adult asthma hospitalizations. In zip code 94109, which stretches from Russian Hill to the Tenderloin, rates are also higher for COPD and falls, as well as high blood pressure, self-inflicted injury and assault. Lastly, 94110 in the Mission experiences higher rates for diabetes, heart failure, hepatitis C, self-inflicted injury, and assault.

Individuals are being treated at higher rates for many of the same health outcomes that are associated with the most common violation types described earlier, including: adult asthma hospitalization rates that are twice the City average, COPD rates that are three times the City average, ER admissions for falls that are 2-3 times the City average, and ER admissions for self-inflicted injuries that are 3-4 times the City average. Zip codes 94102 and 94103 (the Tenderloin and South if Market) experienced both the highest hospitalization rates as well as the highest violation rates.

In general, this data shows that the neighborhoods with numerous SROs experience varying levels of hospitalizations and ER admissions for common medical conditions. The Tenderloin and South of Market are by far the most burdened by poor health outcomes, whereas Chinatown experiences average or better rates for many health conditions. Hospitalizations from COPD and ER admissions from falls, self-inflicted injury, and assault were the four conditions that most commonly exceeded the citywide average in SRO majority zip codes. Varying rates between neighborhoods are likely due to variations in population demographics, access to health care services, and neighborhood conditions (e.g. high violent crime rates in the Tenderloin, SoMa, and the Mission). While hospitalizations may not be the direct result of housing conditions, they do indicate that the resident population in those neighborhoods may be particularly vulnerable to the impact of commonly found violations in SROs.

Impact Analysis of Potential Policies

SRO Operator Training

This section of the HIA assesses the potential policy to require SRO operator education on compliance with Health, Housing, and Fire Codes as a condition for the Certification of Sanitation, or provide an incentive for voluntarily participating in such a training. This training would be provided by SFDPH in coordination with DBI and the Fire Department,and would include information on health, housing, and

fire codes pertaining to SRO facilities, best practices in building operations (e.g. security, bed bugs, etc.), and resources available to support SRO operators in complying with codes and working with tenants.

Methods

Focus groups were conducted with SRO operators to evaluate the potential effectiveness of an operator training. These groups were an efficient method to hear from various operators andassess their knowledge, attitudes, and behaviors associated with SRO conditions and tenants' health. The groups were able identify best practices, challenges, and suggestions regarding the potential policy. Focus group findings were augmented with additional stakeholder interviews.

Focus group participants were SRO employees who routinely dealt with SRO property maintenance and management. These responsibilities often coincide with different roles; therefore, SRO owners, operators, on-site managers, and front desk clerks were all recruited. Privately owned SROs were targeted as participants, with the assumption that these SROs had less access to financial support and other supportive resources than those from the non-profit sector. Participants were recruited through existing relationships with operators and SRO collaboratives and newly initiated relationships with property management companies. A script was created and used during recruitment to provide background information on the project and answer key questions about the focus group and process (refer to Appendix F).

The core purpose of conducting focus groups was to identify the need for operator training and if trainings would result in behavior change that ultimately improves tenant health. Focus group questions covered the following three categories: 1) codes, enforcement, and housing conditions; 2) the relationship between housing and health; and 3) manuals, trainings, and other resources that operators were aware of or used. There were four to five key questions within each category that often related follow-up questions (refer to Appendix G). Before hosting the focus group, questions were vetted by an owner of a prominent SRO property management company in San Francisco. This stakeholder provided both responses to and feedback on questions. Questions were refined as a result of this interview.

The focus group was held at a SFDPH office and lasted an hour and a half. Seven SRO personnel participated in the focus group. SFDPH staffed the focus group with one facilitator and two note-takers. At the end of the focus group, participants received a $50 gift card as compensation for their time. All participants of the focus group were employed by property management companies. To ensure the assessment captured a diversity of operator types, one-on-one interviews were held with two SRO managers that were not owned or managed by a property management.

Findings

The notes from the focus group and three interviews were compiled and organized below according to potential operator training topics: 1) Applicable California & U.S. Laws and Regulations; 2) Best Management Practices; 3) City & Community Resources; and 4) Other.

Applicable California & U.S. Laws and Regulations

Participants demonstrated a solid understanding of Fire, Health, and Building codes. Participants most often spoke about Fire codes, followed by Health then Building codes. One participant felt that given the

high number of codes enforced by each agency, it would be helpful to have a "cheat sheet" of all codes relevant to SROs. He felt that operators and managers would be more likely to know and understand all relevant codes if this information was tailored to SROs. Given participants' adequate knowledge of codes and larger challenges they experience described in subsequent sections, it is unlikely that additional didactic code education would improve compliance and thus tenant health.

Participants said that they acquire knowledge about codes and required building conditions primarily via inspectors and the inspection/abatement process. The two participants whose SROs were not managed by property management companies both said that they also learn about compliance from the SRO building owners. Both were in frequent contact with the owners, who were described as responsive and very knowledgeable. One of these manager's primary language was Chinese and he said that all information (both verbal and written) he receives from City agencies is only provided in English. The SRO owner spoke Chinese, which strengthened this manager's reliance upon him for knowledge on codes and building maintenance, as well as advice on working with tenants.

Focus group and interview questions also assessed participants' understanding of the connection between codes and health. Participants' knowledge of health outcomes related to the top three types of violations observed on inspections - mold, vector control (mice, rats, bedbugs, cockroaches), and garbage - were evaluated. Participants did not mention the primary health outcomes related to these violation categories (e.g. asthma, allergies, injuries and falls, skin conditions, burns and fire injuries, and lead poisoning). The one health outcome that participants did mention was behavioral health problems, both caused by housing conditions and other tenants. Many participants mentioned social and physical isolation as a cause of mental illness. One participant estimated that 25-30% of his tenants "keep everything closed; they live in the dark." Another participant mentioned the small size of the rooms and lack of common space, which limits socializing. Issues of hygiene, cleanliness, and spoiled food were mentioned, but without associated health-related outcomes. While sharing information about health-related outcomes would increase SRO employees' knowledge, it is unclear whether this knowledge would provide motivation to improve compliance and tenants' health.

Management Best Practices

To elicit existing management best practices, participants were asked to share successes they've had with addressing violations and improving housing conditions. Best practices fell under two main categories: 1) Tactical action; and 2) Collaborative efforts. The most frequently mentioned tactical action was removing carpet to reduce the prevalence or likelihood of bedbugs. One participant provided a detailed account of how he resolved a bedbug infestation that affected the entire building. He collaborated with SFDPH staff to identify a viable solution without using pest control. Every room was sealed up one at a time, then heated to 150 degrees with a radiator. All of the rooms were cleaned after treatment and the building was cleared of its bed bug infestation. Regular (monthly) pest control and garbage pickup, along with preventative efforts like sealing holes, were also perceived as important maintenance tactics used to avoid vector issues.

While discussing best practices, various types of collaboration were noted. Participants mentioned collaborating with inspectors, owners, tenants, external vendors, other property managers, and neighboring businesses. One participant felt that "there is a lot of teamwork that happens with property

management." The most frequently mentioned collaborative effort dealt with bed bug removal. Participants mentioned various types of coordination that must occur, such as: working with health inspectors and/or owners to identify the best treatment approach, coordinating timing (and follow-through) with tenants for removal of belongings, scheduling treatment with outside vendors for laundry treatment and heat treatment, etc. While challenges existed (and will be discussed in the subsequent section), participants appeared confident in their ability to maintain good housing conditions as long as tenants weren't the primary cause of the problem. With the right financial resources, making these changes seemed achievable to participants.

Participants' knowledge of and involvement with tenants' health were also assessed. The most commonly mentioned action was calling 911 when a tenant had a serious mental or physical health problem. All participants said that they do this on a regular basis. Participants also mentioned some proactive efforts, such as installing handrails in showers to support aging residents and developing an informal agreement with a neighboring restaurant to give wrong or extra orders to SRO residents. Participants' sense of efficacy for addressing tenant-related housing conditions and tenants' health was much lower than providing standard maintenance fixes and improvements. Tenant-related issues were perceived as far more difficult and complex given the severity of many tenants' mental health issues, the perception of inadequate supportive services, and the challenges associated with navigating relevant processes (e.g. how to file a report for Adults Protective Services). These issues will be discussed in greater detail in the next section.

City & Community Resources

Many of the challenges associated with improving housing conditions and/or tenants' health that participants mentioned are (or can be) impacted by city and community resources. The challenges mentioned were primarily related to: aging SRO buildings, high operating and maintenance costs coupled with low general reserves, master lease agreements, and tenant (and visitor) behavior.

Participants in both the focus group and interviews felt that many challenges, particularly those related to structural and electrical systems, are associated with the age of the SROs. One manager said that many of the SROs are over a hundred years old and were built under different codes, yet they are still held to contemporary codes. Most of the challenges mentioned dealt with elevator repair and replacement. Participants noted the high costs of repair/replacement, long length of repair time, and the interruption of the living environment, or even temporary tenant displacement. Non-operational elevators in SROs create significant barriers for individuals, especially seniors and people with mobility challenges. Non-operational elevators have been a challenging issue in SROs, with a 2009 report citing half the residents living in SROs said the elevator in their hotel was not consistently working and tenants had complaints about falling on the stairs. Elevators are very expensive to repair and/or replace and many SRO operators say they do not have the funding to keep old elevators working or the capital to replace them. The SRO Elevator Work Group and The Mayor's Office on Disability have both been working on initiatives to make sure elevators in SROs are functioning to support residents.

A challenge related to aging buildings is high operating and maintenance costs and low general reserves. One participant cited an example of a tenant who pays $150 per month, an amount that doesn't cover the operating cost of that room. Similarly, an interview participant felt that the costs for repairs and new

appliances are increasing, but the rents are staying the same due to rent control. Multiple participants said that their SROs' general reserves are low because of the low rent for tenants. All but one participant felt that more money was needed to make necessary repairs. When focus group participants were asked if a loan or grant program would help address this challenge, they agreed that it would.

Master leasing of SROs was also perceived as a challenge in achieving good repair. Addressing larger repairs and/or renovations for a master-leased SRO requires that the building owner (not the SRO owner/operator) have the ultimate say on repairs and expenditures.

Tenant behavior was perceived as the most significant barrier to maintaining good housing conditions. Participants spoke about tenants' poor treatment of their rooms, citing specific examples such as: hoarding, destroying furniture, not discarding rotting food waste, and bringing in items off the street, which commonly resulted in bed bug infestations. Tenants' visitors were also seen as a challenge. They were described as being much messier than tenants since they don't live there; they have less of a vested interest in the conditions of the SRO. An interview participant said that visitors often come in and use the showers and clog up the toilets with syringes. Since tenants cannot be denied visitors, he has a problem addressing their poor behavior. This participant wanted help from City agencies to identify a solution to this.

Lacking tactics and/or resources to change tenant behavior was a significant challenge for participants. Participants felt that agency-issued violations often weren't enough to change tenant behavior and even when behavior changed, it was often temporary. Participants also expressed challenges with tenant cooperation during the treatment process. One participant cited the bed bug treatment process as an example. Even though tenants are given the instructions (e.g. remove all bedding, clothing, and textiles from living space, etc.), he said that they do not follow them. Resistance from tenants and the need to negotiate with them was a frequent challenge for him. This participant issues notices to tenants informing them of what they need to do by when, but that often doesn't work. He even calls inspectors to request a notice of violation, but then he faces legal challenges due to a high number of violations.

In both the focus group and interviews, the concept of "extreme" tenants was mentioned. Extreme tenants often suffer from severe mental illness(es) and are the minority that cause the majority of problems. They often create a stressful living environment for other tenants. Participants offered stories of how extreme tenants impacted the (perceived) psychological and physical health of other tenants. One focus group participant estimated that "20% of tenants cause 80% of the problems." This estimate resonated with other focus group participants and 2 out of 3 interviewees as well.

Participants felt that most of the challenges with tenant behavior were associated with tenants' poor mental and physical health. When discussing support that managers needed, one participant said that "at the end of the day, it's all about supportive services." Most participants felt ill-equipped to deal with tenants' health problems, stating that SROs aren't set up to be assisted living nor do they offer the medical support that many tenants need. Further, participants felt that even many case workers weren't adequately equipped, or weren't willing to deal with tenant health issues. Participants felt that they needed better support from City agencies both before and after placement. Participants felt that the screening process needed to be thorough, which could improve the residential fit and length of time they are housed. Similarly, participants wanted to know more information about a tenant's health and

history, particularly mental health and any violent tendencies, before a tenant moves in. Participants felt that this would help them prepare for tenant behavior or help match a tenant to another SRO. (Due to the Health Insurance Portability and Accountability Act of 1996 (HIPAA), there are limitations to what health information can be shared.)

After placement, most participants felt that they did not have the necessary support to deal with "extreme" tenants and others with severe mental and physical challenges. Participants felt that they needed better support from San Francisco's In Home Supportive Services (IHSS). One participant said it would be really helpful to receive guidance around how to prepare a strong case for Adult Protective Services (APS), as he has had challenges with preparing cases and navigating the process. Another participant suggested the creation of a social worker "team" for private SROs. This team would consist of counselors responsible for "wellness checks" since the owners and managers don't have the time or skillset for this. He suggested that the team make weekly visits to ensure that tenants are taking their medication, eating, and so forth.

Participants also had questions and suggestions about the roles and responsibilities of SFDPH. One participant asked if SFDPH dealt with hazardous materials issues related to infectious diseases, citing a recent example of when they had to bring in a hazmat company to clean up a methicillin-resistant staphylococcus aureus (MRSA) case. Because bed bugs are a public health issue, another participant felt that SFDPH should be responsible for the cost and management of the treatment. Additionally, participants said they would like the Health Inspectors be more proactive than reactive; they felt as though they only receive guidance from SFDPH when they ask or after receiving violations. That said, they did acknowledge helpful guides they've received from SFDPH related to Shigella, bed bugs, and recycling for sharps containers.

When asked what training topics would be useful, most suggestions dealt with how best to work with and acquire information from City agencies, primarily HSA, SFDPH, and the Fire Department. Topic suggestions included: "Better communication and engagement avenues for management companies with City agencies," "How to prepare a case for APS for more effective response," and "Working with Supportive Services." Participants were also interested in agency-specific trainings. One participant attended a previous SRO-focused training in 2009 that was organized by SFDPH. He felt that "everything about [the training] was useful." The other category for training topics related to dealing with tenants. Suggested topics included: "How to communicate with individuals with mental health challenges" and "Tips for de-escalation, communication, and protection." Given participants' feedback on the challenges of working with the SRO tenant population, supporting property managers, operators and owners by helping them connect with and learn from City agencies will be integral to their success with code compliance and tenant support.

Other

This section details findings from the focus group specific to inspection processes. Participants saw a need for improved inter-agency collaboration; they believed there was duplication amongst agencies' citation process and also a lack of intra-agency communication. One participant said that during one day, his SRO was cited for the same violation by two different agencies.

Additionally, the majority of participants felt that inspectors needed to be more stringent with enforcement at SROs. Many felt that inspectors have become "desensitized" by the poor conditions in SROs and as a result, they lower their enforcement standards for SROs compared to residential houses and tourist hotels. One proposed solution for these issues was that inspectors rotate hotels every year in order to give them "fresh eyes." Feedback varied regarding inspectors' relationship to tenants. Some participants felt that inspectors negatively target certain tenants while others believed that inspectors were far more lenient with them versus operators, particularly during abatement hearings.

Potential Health Impacts of Operator Training

Based on the focus group findings, data regarding residents and building/neighborhood conditions, and the existing empirical literature, Table 10 summarizes the estimated impacts of the potential operator training policy with respect to direction, magnitude, severity of impacts, and strength of causal evidence.

Table 10. Potential Health Impacts of Operator Training Policy

Health Determinant	Direction of Impact	Magnitude of Impact	Severity of Impact	Strength of Causal Evidence
Adherence to Applicable CA & US Laws and Regulations	~/+	Minor	Low	*
Implementation of Management Best Practices	+	Minor/Moderate	Low-Moderate	*
Accessing City and Community Resources	+	Moderate	Low-Moderate	*

Direction of Impact refers to whether the policy will positively (+), negatively (-), or not (~) impact health determinants.
Magnitude of Impact reflects a qualitative judgment of the size (i.e., number of people impacted) of the anticipated change in health determinant effect: Negligible, Minor, Moderate, Major.
Severity of Impact reflects the nature of the effect on health determinants and its permanence:
High = intense/severe; Mod = Moderate; Low = not intense or severe.
Strength of Causal Evidence refers to the strength of the research/evidence showing causal relationship between the alternatives and the health determinants: * = plausible but insufficient evidence; ** = likely but more evidence needed; *** = high degree of confidence in causal relationship. A causal effect means that the effect is likely to occur, irrespective of the magnitude and severity.

Housing Data and Data Analytics

The second potentialpolicy selected for further examination using the HIA focused on data collection, analytics, and utilization to improve SRO conditions. Table 11 details each component of the policy.The followingsection examines the potential impacts of the policy, specifically: 1) City departments coordinating data collection and management; 2)City departments using data for performance metrics; and 3)Making the housing inspection and violation data publically available.

Table 11. Components of potential Housing Data and Data Analytics Policy		
Requirement	**Managing Entity**	**Detail**
Facility Data Reporting	DBI	Requirement to report additional information on housing attributes including: number of rooms, toilets, showers, and rooms capable of supporting microwaves and refrigerators, ADA accessibility, etc.
Data Analytics / Enhanced Analysis of Data	SFDPH	DPH will transition to an inspection database product that allows for real-time data sharing between SFDPH and DBI. An interagency working group for development and monthly tracking of performance metrics for quality improvement and measurement of impact will be established.

Methods

The research questions on page ten framed the assessment of the impact that the housing data and data analytics policy would have on health outcomes.The assessment first examines the current housing code enforcement process, and specifically focuses on data collection processes. Second,the analysis identifies best practices and efforts by other cities and assessed the potential impact they could have on City processes if implemented. Lastly, the section provides anoverview of the City's current performance, and examines the policy's impact on internal and external SRO-related practices and the identification and remediation of health-related violations.

Findings

Existing Inspection Processes

San Francisco's existing housing code enforcement infrastructure provides a foundation upon which the City can build to expand its efforts to protect vulnerable tenants from poor housing conditions within SROs. Three departments (SFDPH, DBI and Fire) drive the current system and enforce separate codes pertaining to the habitability of rental units and residential hotels. The departments' approaches to inspections, enforcement, and case management are all very different, as each department has different code enforcement authority within the jurisdiction of the County of San Francisco.

The Housing Inspection Services (HIS) Division of the Department of Building Inspection enforces the Housing Code, which governs the structural requirements of existing residential buildings. In addition to inspections, HIS also performs outreach to tenant advocacy groups to educate tenants on their housing rights and methods of redress. Other divisions within the department perform inspections on new or remodeled properties and will sometimes refer cases to HIS.

The Healthy Housing and Vector Control programs in the Environmental Health Branch of SFDPH enforce local health code pertaining to preventing health problems caused by unhealthy environmental conditions in multi-unit residential buildings, hotels and shelters (refer to Appendix H for diagram of SFDPH inspection process). These conditions include the nuisances defined in the San Francisco Health Code. Example nuisances enumerated by the health code include: the accumulation of garbage or

vegetation, unsanitary conditions, and the presence of mildew, infestations, spoiled food, lead, illegal animals or poison oak. Before 2009, SFDPH only performed routine inspections of SRO common spaces in their code enforcement efforts. Since 2009, the Hotel Inspection Program performs routine inspections of SRO buildings as well as individual rooms. This permits the SFDPH to inspect the common rooms of buildings with over four units every three years. As of 2014, private units were included into the inspection process and are inspected as needed.

The Inspection Section of the Bureau of Fire Prevention inspects most buildings (commercial and residential) to verify that they comply with the San Francisco Fire Code.The Inspection Section inspects the life safety components of new building construction, building remodels, and fire sprinkler and fire alarm systems to ensure compliance with applicable codes. The City is geographically divided into 17 Fire Inspection districts.

The housing code enforcement process for each department generally begins when a complaint is issued or a routine inspection requirement generates an inspection referral. The housing inspection programs will then inspect a property, and upon finding a noncompliant condition, will either issue a formal Notice of Violation, and/or will state that they will return to see that landlords have abated the problems. There may be several reinspections to ensure abatement. If the condition is not remediated within an appropriate amount of time, departments may escalate the case to a Director's Hearing, an administrative hearing to force compliance. In a small percentage of cases where property owners refuse to abate conditions, the department will refer cases to the City Attorney's Office.

The number of proactive routine inspectionsconductedis based oninspectors' capacity, legislative requirements for routine inspections, and inspectors'complaint-based inspection volume. The targets of inspections may not correspond to actual safety risks and are insteadoften prioritized based on inspectors' competing demands.

Directly comparing enforcement activities and data across departments presents multiple challenges. Though municipal and state codes give similar legal authority to departments, their enforcement and abatement strategies often vary. Additionally, departments are responsible for enforcing different sets of codes and collect, track and achieve compliance very differently. These differences make it challenging to make direct comparisons.

The database systems used by departments also make it difficult for comparisons of departments' data or for departments to regularly conduct internal analysis. Each department stores data from inspections and cases in their own unique databases that are not compatible with one another. This data is not readily accessible for back-end reporting, refining business processes, or sharing with the public on a consistent data stream that is in a machine-readable format. The housing inspection and violation data is currently not regularly used in any departmental performance metrics or by the City's Controller's office. Legislation sponsored by Supervisor Scott Weiner (San Francisco Board of Supervisor Member for District 11) proposed looking at having similar metrics for each department that collected housing enforcement data. The housing inspection data publication strategy, which aims to create an automated process for regularly publishing housing violations data on the internet, is in the process of being

revaluated by SFDPH. The last publication effort occurred in 2013 and focused more on the value of publication rather than the usefulness of the data to departmental activities. Unfortunately, the systems which help departments track cases have minimal analysis dashboard functionality. Departments also noted that the case management software helps track billable time (officials charge property owners for inspections if they do not abate violations quickly), but the systems' data collection and storage makes it difficult for departments to perform aggregate analysis.

Currently, there is minimal data collected about building characteristics. Richer building data could better inform placement of residents into SROs and assist the development of predictive analytics models to facilitate risk based inspections. One facet of the policy proposal was to require additional reporting on housing attributes, including: number of rooms, toilets, showers, and rooms capable of supporting microwaves and refrigerators, ADA accessibility, etc. This information could aid in creating a screeningpolicy and associated tool for SRO hotel placement to ensure proper SROand tenant housing fit. This could possibly reduce tenant issues for SRO operators by ensuring tenants needs are met. Additionally, this type of information could be used to prioritize inspections based on specific risk-based criteria.

Based on conversations with departments, staff from different departments conduct little if any formal coordination on the housing inspection process and do not meet frequently. Two departments, however, meet regularly to discuss SROs. The Board of Supervisors' SRO Task Force, chaired by DBI's Chief Housing Inspector, includes a representative from SFDPH's Environmental Health. TheTask Force mainly focuses on physical building characteristics of the SROs, but also works on a limited basis to address the mental and physical health and supportive service needs of SRO residents. Outside of Task Force meetings, departments and their staff have limited interaction, which are primarily through occasional referrals. Some coordination existed among technical points of contact during the development of the Housing Facts Data Standards (HFDS) in 2012 and 2013. The absence of coordination likely results in missed opportunities to increase efficiency and effectiveness of the inspection process.

Open Data

There are three questions this HIA seeks to answer related to the open data element of the housing data and data analytics policy. The first is how stakeholders would respond to more transparent and reliable housing inspection data. The current housing inspection system provides minimal visibility and transparency oncurrent conditions to the departments and public. As of early 2016, it appears that violations and inspection data is only publically through individual address requests on department websites, inhibiting external examination of citywide trends over time. Both SFDPH and DBI have a search tool on their website to lookup permit and complaint information related to a particular address.

There are few peer reviewed empirical studies that examine the impact of open data initiatives on particular outcomes, and studies focused on the use of health-related open data are particularly lacking. The lack of research may be due to the relative newness of open data portals at the city level. However, there are various case studies that have used open data on housing violations and inspections to

promote transparency with an end goal of improving health and safety, even if their impact has not yet been studied.

In New York City, the office of the Public Advocate launched a tool using open data on housing violations to highlight the City's worst landlords. According to the current Public Advocate, Letitia James, "too many New Yorkers — specifically those living in low-income communities — rent in substandard buildings run by landlords and management agencies that are too lax with basic repairs and upgrades." The goal of launching this tool was to motivate landlords to seek emergency intervention to repair their buildings through a number of loan programs, but also to monitor and bring forth legal action to for those landlords who do not repair housing that threatens the health and safety of their tenants.

There are several reports that discuss how open data has led to better service delivery. One of the most documented case studies is from the City of Louisville and their use of open data to drive continuous improvement, specifically around increasing government performance based on the use of open data and business innovation principles. Louisville's Mayor Fischer and The Office of Performance Improvement are using a multipronged approach to transform Metro Government. According to a *2013 Transforming Local Government Case Study,* these improvements include removing two hundred days from the hiring administration processes, reducing unscheduled overtime expenditures by $2 million dollars, and using data to better allocate resources and hold government services accountable (e.g. analyzing missed trash pick-ups). The open data program was complemented with the development of cross-functional teams that worked with the Office of Performance Improvements, the implementation of a program for identifying, tracking, and analyzing key performance indicators, and the use of continuous improvement (Lean, Six Sigma) methodologies to make improvements in quality.

In San Francisco, the San Francisco Department of Public Health released an open data set on restaurant inspection scores. In 2012-13, Yelp began posting restaurants' food safety scores. A preliminary analysis examined the effects this transparency measure may have had on restaurant health and safety conditions (refer to Table 12 for summary of analysis findings). The findings indicate that posting scores on Yelp had a null effect on restaurant health and safety conditions. While further research is needed to confirm these findings, it could indicate the importance for open data to be paired with continuous improvement programs,analysis of the data to optimize its effectiveness, or ensuring transparency efforts are appropriately targeting the public.

Table 12. Effect of Posting Food Safety Score on Yelp on San Francisco Restaurant Health and Safety Conditions

Health and Safety Measures	Pre-Yelp Posting (2011-2012)	Post-Yelp Posting (2013-2014)
Average Safety Score	90.6	90.2
Percentage Operating in Good Condition	57.70%	55.3%
Percentage Operating in Adequate/Need Improvement Condition	39.20%	41.80%
Violation Per Routine Inspection- Unscheduled	2.84	2.88

Notes: Analysis examined data only for Restaurants and excluded other establishment types
Source: SFDPH Environmental Health Database

Although there might need to be additional programs and guidelines to increase open data's impact, data collection and publication for external stakeholders could still have benefits. Governments publishing inspection and violation data on residential housing could equip citizens and advocacy groups with information about past violations that could prevent potentially hazardous exposures among new tenants. This data could aid in addressing past exposures by making the full volume of landlord records easily accessible. During this HIA's scoping process, a representative from a community law center in San Francisco expressed how difficult it was to get the regulatory information on a property because this data is provided separately by different agencies in various formats and must be searched one address at a time. The open publication of inspection and violation data would enable advocacy groups to gain better insight into the total volume of records pertaining to a particular landlord's entire rental portfolio from all three departments. Additionally, it could be advantageous toallow researchers, journalists, and other civic minded individuals to more easily access data that could be used for policy advocacy and suggestions for improved government function.

The existing literature and case studies on open data strategies do not necessarily demonstrate they have had direct improvements in health outcomes, but they do indicate that these strategies can potentially lend themselves to increasing the efficiency of public health operations, improving data quality, timeliness, and usefulness, improving data access,and promoting government transparency.

Internal Data Analytics

The second question regarding the housing data and data analytics policy is how data can be used internally to impact the identification and remediation of health-related violations. In municipal governments across the country, there has been a move toward using data to improve departmental performance. City "Stat" programs have become very popular over the last twenty years as important reforms in governmental operations. These programs have been designed to use data analytics and performance measures to drive change in government. In 1994, New York City's Police Department launched one of the first programs, called CompStat. Almost 12 years later in New York City, former mayor Michael Bloomberg instituted a Citywide Performance Reporting System with 500 indicators publically available online to measure city performance and quality of life. Subsequent reports have documented the success of this reporting system (now called NYCStat) for both helping citizens become directly involved in government by measuring the City's performance and increasing accountability to residents. Previous to NYC launching NYCStat, former Baltimore Mayor Martin O'Malley's launched CitiStat in 2001 and, after becoming governor, wenton to create Maryland's StateStat in 2007. In March 2004, the San Francisco began "SFStat," Mayor Gavin Newsom's internal management and accountability program based on the "Citistat" model from Baltimore, MD. The SFStat program objective was to gather and review data from thirteen of the largest City departments regarding their service delivery, budget status, and human resources information such as employee overtime. In San Francisco, this program was only in existence for several years.

The use of data internally in San Francisco is well documented by City's use of performance metrics to inform funding and decision making, which is promoted bythe city charter's call for a performance based budget. In 2003, a local ordinance created the San Francisco Performance Team in 2003, the City Services Auditor group within the Controller's Office. Government accountability teams develop performance measures and evaluate them by requiring additional reporting requirements or by reviewing existing data. This team could provide guidance on setting up an inter-agency performance tracking system related to housing inspections and violations. The housing inspection data that departments' collect could be aggregated and analyzed to highlight current performance trends and help identify ways to improve performance. Analysis of that data would allow for departments and other city officials to examine performance trends, with minimal increases in reporting requirements.

Increasingly, predictive analytic tools are being developed to gather open access data from social media sources (e.g. Yelp reviews) and other novel data streams to inform public health programs and other government processes. These tools could support health agencies to prevent and reduce negative health outcomes. To date, most of the research in the local health sector has focused on identifying restaurants at a high risk for health and safety violations, unreported foodborne illness outbreaks and identifying foods implicated in foodborne illness. To a lesser degree, cities have also been working to apply predicative analytics to housing inspections. New York City has used models to prioritize its Fire Department inspections. In the spring of 2011 a string of fires in NYC prompted New York City Mayor's Office of Digital Analytics and subsequently the Data Science team at the Fire Department of New York built a "Fire Cast" model. Essentially, this model was the basis for the Risk Based Inspection System, which mines information from databases across the city to help prioritize the 50,000 buildings firefighters inspect annually. The model uses a non-parametric logistic regression for each fire district to track, score, prioritize and then create a priority list of inspections. The model has helped the fire department with resource allocation and safety improvements. The NYC Fire Department has approximately 300,000 buildings in its purview, but only has resources to inspect 50,000. This model has helped with prioritizing which buildings to inspect given their existing resources. From 2002 – 2013, fires decreased 16% and fire deaths are at the lowest levels on record. While not as technologically sophisticated, Portland uses a housing inspection model where certain inspection districts have been identified to receive enhanced inspection services, whereby complaint-based inspections that find a certain threshold of violations can then trigger inspection of additional rental units in the property owner's portfolio.

Within public health, quality improvement practices are growing as a result of Public Health Accreditation requirements. Quality improvement is a formal approach to the analysis of performance and systematic efforts to improve it. There are numerous models used across local public health agencies. The Fillmore County Health Department in Minnesota used a rapid cycle improvement method to reduce the timeframe from notification of environmental health hazards to the time they were investigated, in order to reduce negative health impacts. This approach included new processes and tools to reduce response time, including a real-time data system with reporting features that can track both response time and efforts, to record cases and extract reports. As part of the process, performance metrics were put in place to ensure that 90% or more of initial investigations for environmental health

hazards were occurring within 24 hours. Wicomico County Health Department in Maryland used a quality improvement initiative to reduce critical violations in retail food service facilities when they found out that the county had a salmonella infection rate twice the state average. Using over 1,000 inspection records, they identified that 51% of critical violations were due to improper cold holding of potentially hazardous food. Using this information, the department deployed new targeted outreach and education strategies to reduce the number of critical violations. While the overall the number of violations did not change significantly, the Department was able to establish strong relationships with the restaurants and work with them on long term food safety plans. The goal was to reduce the number of annual critical violations in the county by 33%.

The last question specific to the housing data and data analytics policy examines how stakeholders (City agencies, private organizations, non-profit agencies, SRO operators) would respond to improving interdepartmental database interoperability and creating coordinated metrics. Currently, there is not a forum to formally discuss coordination in the housing inspections process or how inspection and case management data and data publication might strengthen the programs. A workgroup or regular meeting might facilitate further discussion of coordinating activities. Participants in the focus groups and interviews conducted for this HIA indicated that SRO operators desired greater coordination between City agencies. Participants saw a need for improved intra-agency collaboration; they believed there was duplication amongst agencies' citation process and also a lack of intra-agency communication. One participant said that during one day, his SRO was cited for the same violation by two different agencies.

It is challenging to project precisely how increased coordination would influence departmental performance. Performance could improve through the sharing of best practices on inspector allocation, inspection prioritization, inspection procedures, and enforcement tactics. Knowledge transfer would help build consensus on if a particular strategy is implementable or effective. Regular meetings could potentially increase visibility of current housing conditions. Coordination should enable departments to explore if there were cases that could benefit from stronger enforcement mechanisms like Director's Hearings. The use of coordinated enforcement mechanisms such as a joint task force would likely increase because of a regular meeting between departments.

This coordination would likely increase the rate of referrals between departments once more channels of communication were developed. Interdepartmental referrals could help violation detection, because they inform departments about noncompliant building conditions in properties that departments miss in their own inspections. With an increase in the referral process, there could be a broader conversation about department caseloads, so departments are not disproportionately burdened with cases.

Potential Health Impacts of Housing Data and Data Analytics

Table 13 summarizes the estimated impacts of the potential housing data and data analytics policy with respect to direction, magnitude, severity of impacts, and strength of causal evidence.

Table 13. Potential Health Impacts of Housing Data and Data Analytics

Health Determinant	Direction of Impact	Magnitude of Impact	Severity of Impact	Likelihood/ Strength of Causal Evidence
Data collection, reporting and analytics related to SROs and code enforcement	**+**	**Moderate**	**Moderate**	**
Open Data: increased transparency and data collection	**~/+**	**Minor**	**Low**	*
Interdepartmental operability (coordinated identification)	**+**	**Moderate**	**Low-Moderate**	*

Direction of Impact refers to whether the policy will positively (+), negatively (-), or not (~) impact health determinants.
Magnitude of Impact reflects a qualitative judgment of the size (i.e., number of people impacted) of the anticipated change in health determinant effect: Negligible, Minor, Moderate, and Major.
Severity of Impact reflects the nature of the effect on health determinants and its permanence:High = intense/severe; Mod = Moderate; Low = not intense or severe.
Strength of Causal Evidence refers to the strength of the research/evidence showing causal relationship between the alternatives and the health determinants: * = plausible but insufficient evidence; ** = likely but more evidence needed; *** = high degree of confidence in causal relationship. A causal effect means that the effect is likely to occur, irrespective of the magnitude and severity.

SECTION FIVE: RECCOMENDATIONS

In response to the HIA findings, these recommendations were developed by the San Francisco Department of Public Health to best improve the living conditions of SROs tenants through analysis of the potential polices. Evaluation will be an important component of the policy recommendation given the limited existing empirical evidence.

Recommendations for SRO Operating Training Certificate

Recommendation # 1: A mandatory training for SRO operators that focuses on successfully working with the SRO tenant populations, increasing knowledge of health outcomes, and understanding the role of City agencies and management best practices.

The focus group findings revealed that SRO operators had adequate knowledge of Health, Housing and Fire Codes. As such, it is unlikely that a training focused solely on City codes would significantly improve compliance or tenant health. Participants spoke about the fragmentation of Health, Housing and Fire codes and expressed the need for centralized information and a better understanding of each agency's role. SRO operators lacked knowledge and/or practices on how to effectively work with tenants and housing issues that resulted from tenant behavior (e.g. hoarding, bed begs). Participants were not aware of the primary health outcomes of poor housing quality (e.g. asthma, allergies, injuries and falls, skin conditions, burns and fire injuries, and lead poisoning). Given this feedback, training that focuses on the following topics would be most efficacious:

- Better communication and engagement avenues for management companies with City agencies
- How to prepare a case for Adult Protective Services

- Links and advice to working with supportive services
- How to communicate with individuals with mental health challenges
- Resources and organizations that can help reduce social isolation and loneliness of tenants
- Tips for de-escalation, communication, and protection
- Trauma Training

Given participants' feedback on the challenges of working with the SRO tenant population, supporting property managers, operators, and owners by helping them connect with and learn from City agencies will be integral to their success with code compliance and tenant support. SRO operators need to have the know-how, skills, and tools to address the problems they are facing. Without adequate knowledge, SRO operators may not be confident enough to act or may not know how to resolve issues. Research indicates mandatory trainings are more effective than voluntary trainings and can potentially reduce critical violations.

Recommendation # 2: The creation of culturally competent and consolidated educational materials for SRO operators that would serve as a one stop guide.

Given the diversity of operators' roles and responsibilities, this "one stop guide" will touch upon: code compliance, City agency information, and tenant support. The information included within the guide would complement the proposed training topics.

Based upon focus group feedback, educational materials concerning the following areas would be most useful for operators:

- **Consolidated Housing, Health, and Fire Codes**. Codes applicable to SROs would be consolidated into one booklet/website.
- **City Agency Information**. Brief outline of each City agency and its associated roles, along with contact information and tips for navigating agency systems and processes.
- **Decision Tree**. Outline of various scenarios and any associated agencies, services, community-based organizations, and so forth.
- **Best Management Practices**. Best practices related to high risk health and housing topics, such as bed bugs and hoarding. Topics covered should be co-determined by operators and City agencies.
- **Tenant Support and Communication Guide**. This would include a brief explanation of housing issues and associated negative health outcomes, along with tips aimed at improving interaction and communication with tenants such as: conflict communication, trauma training, and tips for de-escalation and protection.

- **Additional Resources**. This document would point operators towards additional useful resources, including grant/loan information, related community based organizations, and existing materials designed to support SRO operators.

Recommendations for Housing Data and Data Analytics

Recommendation #3 – Standardize and automatically publish housing inspection data, including collection of SRO facility attributes.

The City of San Francisco can use its existing open data platform, a product of Socrata, to publish their housing inspection data. The data has only been published as a dataset once on San Francisco Open Data, and Health Inspection and DBI Inspection data is available through search functions on their respective websites. Yet, there is no regular data publication of all the data or as a dataset. The central issues of publication are automating the publication, and standardizing and validating the data.

More than any the other application of the data, the data publication would likely improve the visibility of the housing existing conditions and the level of property maintenance. If the City published the data, the activities of the housing inspection programs would be more accessible than they are presently. Anyone with access to the Internet could retrieve the data from the portal. Various data consumers, moreover, may build tools or other applications using the data that couldenhance the transparency of the City's housing conditions. In examining the data consumers potential use cases, it becomes apparent that the transparency and visibility of the housing conditions would increase with automated publication of data that is publicly available. The main types of end-users are the departments themselves, the public, developers, property managers, and tenant advocates.

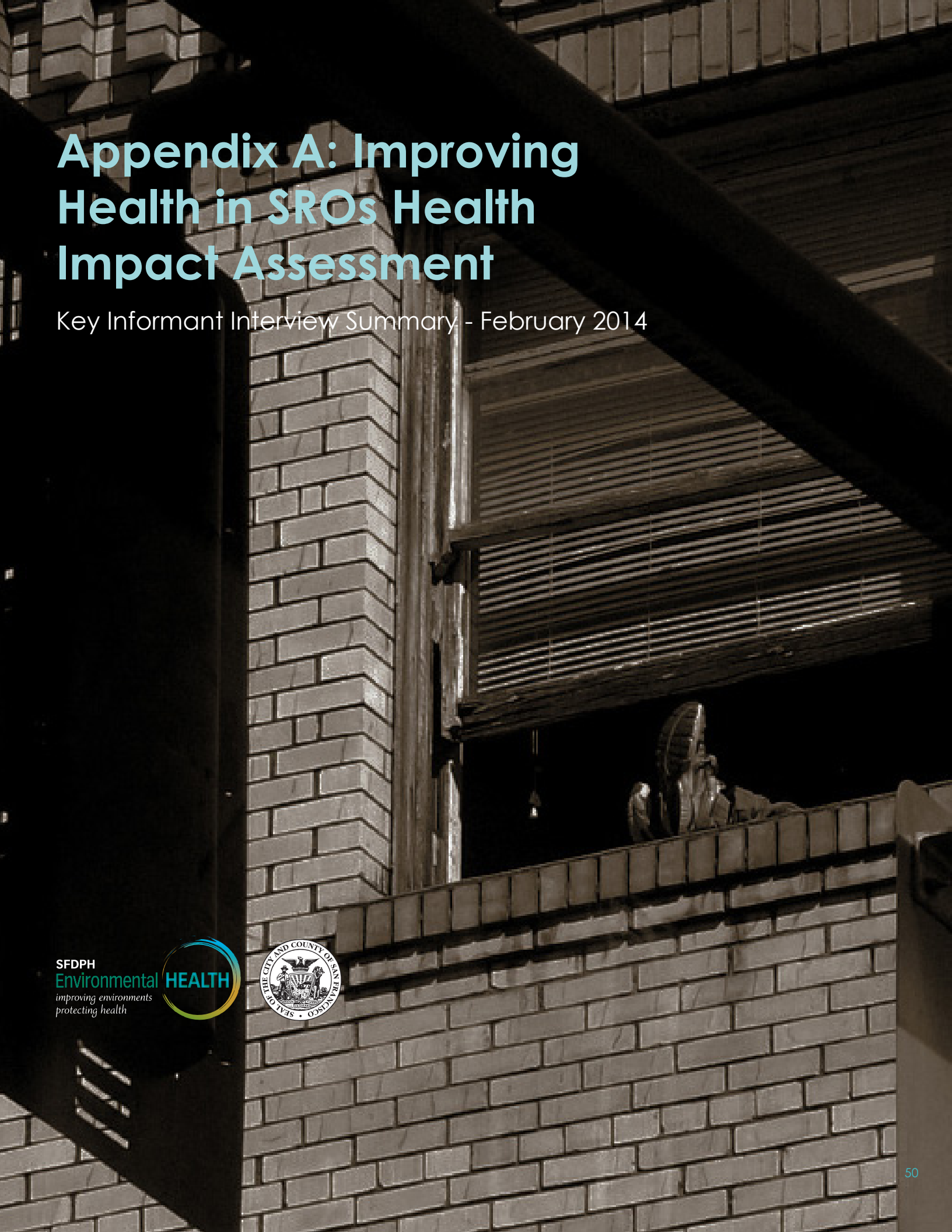
Recommendation #4 – Incorporate data analytics into business operations.

Since the departments collect and produce data as they conduct inspections, performing analysis on the data will provide insight on how to adjust inspection business processes. Currently, most of the knowledge of inspections and properties is institutional knowledge that lies with individual inspectors and is lost when they leave because the information isnot readily transferrable. Data-driven planning may improve performance on the metrics of violation detection rates, abatement rates, and abatement speeds. The use of analysis tools would likely improve all departments' performance along these lines. The departments could better understandtheir current capacity by reviewing the frequencies, averages, and ranges of violations by district, violation types, building types where violations occur, abatement rates, and abatement times. Violation rates, for instance, could help departments assess whether they are adequately prioritizing inspections. In prioritizing inspections, inspectors may find that inspection types with lower violation rates (or noncompliant conditions) are lower risk, and less pressing than types with higher rates.

Recommendation #5 – Create an interagency housing data sub-committee to establish and track performance measures.

The City might want to consider expanding coordination between the housing inspection units departments to share best practices. Currently, there is not a forum to discuss the housing inspections process specifically or how case management data and publication might strengthen the programs. A regular meeting might facilitate further discussion of coordinating activities. In many of the case studies examined, open data and increased data analytics alone do not facilitate vast improvements. Inter-agency working groups and forums for continuous quality improvement, coupled with data analytics and strong leadership support, appear to work best. Moreover, the departments themselves could benefit from easily seeing how other departments' activities complement and contrast their own. Data publication could also help show where their enforcement activities overlapped. Meetings would enable departments to explore if there were cases that could benefit from stronger enforcement mechanisms like Director's Hearings. The use of coordinated enforcement mechanisms such as the joint task force would likely increase because of a regular meeting between departments.

Finally, evaluation is an important part of the policy recommendations given the dearth of empirical evidence on the impacts of implementing open data strategies. Creating and implementing an evaluation plan as part of the overall HIA and each associated recommendation would ensure continuous program quality improvement. Some of the activities in the evaluation plan would include: 1) Examining how key program partners will participate in the evaluation and performance measurement planning processes; 2) Rigorous, sound qualitative and/or quantitative methods for answering the evaluation questions; and 3) A plan of action for the evaluation that includes roles and responsibilities and milestones with deadlines.



Appendix A: Improving Health in SROs Health Impact Assessment

Key Informant Interview Summary - February 2014

SFDPH
Environmental HEALTH
improving environments
protecting health

BACKGROUND

Single Room Occupancy Hotels (SROs) are an important source of low-income and transitional housing in San Francisco. However, numerous conditions exist within and around these facilities that result in negative health outcomes for their residents and the surrounding community. In September 2013, the San Francisco Health Commission passed a resolution to improve the health of SRO residents. The resolution requested that the San Francisco Department of Public Health (SFDPH) carry out a health impact assessment (HIA) to evaluate to identify the key issues associated with food security and other conditions to improve the health of residents in SROs.

The traditional objective of an HIA is to examine a specific proposed policy, plan, or program with regards to potential future health benefits or risks to inform decision making. This HIA is unique because we are not starting with a discrete policy in mind, but rather look to solicit, synthesize, and understand the "policy wish lists" of diverse SRO stakeholders first.

The outcome would be an HIA report detailing the magnitude of the problem the policy would address and the potential changes in health that could result if the identified policy, plan, or program were implemented, in an effort to motivate and support necessary change.

To facilitate more productive group brainstorming, SFDPH conducted a number of key informant interviews to understand potential issues that could be addressed at a policy level. This report details the findings from these interviews.

METHODS

The HIA team interviewed key individuals that interface with SROs and their residents. The objectives of the interview were to help Environmental Health staff gain insights into the SRO system and guide future group policy brainstorming sessions. The HIA team developed a semi-structured questionnaire to guide interviews with SRO stakeholders (see Appendix 1), specifically focusing on:

- key health issues
- optimal living conditions for a healthy environment
- ideas for policies to improve residents' health.

We met with 22 key informants for hour-long, in-depth interviews between October 2013 and January 2014, including informants (see Table 1) affiliated with SFDPH, other city agencies, non-profit providers, SRO tenant advocacy collaboratives, and a business working with private SROs.

Typically, two HIA team members were present in the interviews, with at least one person taking detailed notes. In-depth interviewing allowed participants to discuss the complexities of improving health in SROs with more depth and candor, than other data collection methods like focus groups. Interviewing such a broad spectrum of stakeholders enabled us to:

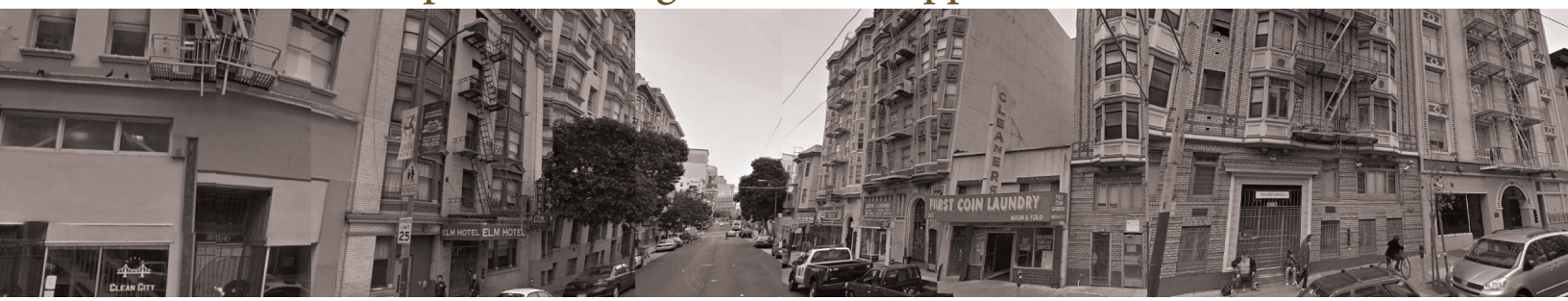
- better understand common trends and policies that could benefit the health of residents living in SROs
- more efficiently lead policy brainstorming sessions and research scoping.

Two team members analyzed and coded notes from the interviews which are presented as major themes and sub-themes. The goal of this summary document is to facilitate brainstorming around concrete policies that can be explored through an HIA. We purposefully did not separate findings by stakeholder type.

Table 1: Identifying organizations of key informants (number of interviews), n=22

Department of Public Health: • San Francisco Department of Public Health (5)
Other City Agencies: • Office of Mayor Edwin Lee (1) • San Francisco Department of Building Inspection (1) • San Francisco Department of the Environment (1) • San Francisco Human Services Agency (2) • San Francisco Office of Economic and Workforce Development (1) • San Francisco Public Utilities Commission (1)
Non-profit Groups and SRO Collaboratives: • Cadillac Hotel (1) • Central City SRO Collaborative (1) • Chinatown SRO Collaborative (1) • Episcopal Community Services SF (1) • Harm Reduction Center (1) • Mission SRO Collaborative (1) • Tenderloin Housing Clinic (1) • Tenderloin Neighborhood Development Corporation (1) • Urban Solutions (1)
Private SROs: • Private SRO building contractor (1)

SRO Hotels: Complex Challenges, Vibrant Opportunities



private SRO hotels

removing accessibility barriers

protecting tenants from victimization

a sense of care

security

peer-based model

a livability standard

tenant appreciation days

resources

keeping people in houses that are safe and healthy places

MAIN THEMES

Using the frequency by which major areas of concern were mentioned, we provide a brief description of five major themes followed by short descriptions of the sub-themes. Content is organized based on how often it was expressed.

1) Building Conditions

a) Owner Negligence
b) Tenant Behaviors
c) Regulatory Coordination
d) Management Incentives & Support
e) Outdated Housing
f) Accessibility
g) Violence
h) Management-Tenant Relationships

2) Supportive Services

a) Case Management
b) Social Interaction
c) Successful Movement Through System
d) Tenant Empowerment
e) Negative Feedback Loop

3) Housing Fit

a) Housing Matched to Ability
b) Housing for Each Step in Stabilization
c) Assessment of Housing Needs
d) Family Housing
e) Housing as Healthcare

4) Real Estate Pressures

a) Tenant Protections
b) Unaffordable Rent
c) Supportive Housing Growth
d) Hotel Conversion Ordinance

5) Healthy Eating

a) Cooking Facilities
b) Nutrition and Cooking Education
c) Food Access
d) Building Community with Food

When asked what conditions were necessary for SRO resident health and wellness, not surprisingly, the two most commonly mentioned overarching themes were the environmental conditions in and around SRO buildings and the importance of supportive services for SRO residents to be successful in their housing and to attain overall wellness. Three other broad themes emerged, including housing fit, real estate pressures, and healthy eating. These last three themes likely emerged because of their importance in current work and the general housing climate.

Each of the sub-themes summarizes some of the concerns and ideas for improving life in SROs that arose in the interviews. Few concrete policy suggestions emerged from these interviews given the questionnaire's focus on understanding current conditions and lack of time. Our goal is to use these themes to facilitate policy ideation by SRO stakeholders who will help select potential policies or programs ripe for analyzing prospective impacts on health.

Building Conditions

One of the most prominent areas of concern that emerged in our interviews was the environmental conditions within and around SROs. The subthemes below are an attempt to summarize some of the issues and ideas that emerged and in our conversations, to help narrow the process of policy selection.

Owner Negligence

Some respondents were more inclined to feel that the approach to improving housing conditions needed to target building managers and owners that were not properly caring for their property. Issues include unclean bathrooms (4 cleanings per day was one recommendation), poorly done repairs, deferred maintenance, improperly heated and ventilated rooms, unsecured garbage leading to pest infestations, etc. People mentioned that in buildings that the City master leases, it is easier to make sure that the facilities are maintained because resolution of code violations is part of the master lease agreement.

Both "carrot and stick" approaches were mentioned. Some suggested that landlords be penalized and pay for temporary rehousing fees for their tenants while violations are corrected. Others suggested a more conciliatory approach, using trusted allies in the community to work with owners to see value in making building improvements. One example was a short-lived forgivable loan program through Redevelopment (prior to the closure of redevelopment agencies) for major improvements – to be eligible the hotel owner had to resolve all outstanding violations.

Photo Credit: San Francisco Chronicle/Michael Maloney

Tenant Behaviors

It was acknowledged that tenants can be the cause of many sanitation issues. Hoarding, lack of cleaning individual rooms, destructive behaviors, or simply being too disabled to leave one's room were noted to result in unhygienic and disruptive conditions for the individual, and eventually neighboring units. One person mentioned that unlike in the past where extremely volatile persons would be placed in more restrictive environments, SROs have become both the first and last stop between the streets for the most problematic tenants. The most commonly mentioned solution to tenant generated problems was more frequent interaction with case workers or the provision of supportive services in the form of In-Home Supportive Services. Other suggestions included making buildings more accessible so that individuals with disabilities could leave their rooms and use the facilities or transferring tenants to a housing situation that could better fit their needs.

Regulatory Coordination

Some informants said a more coordinated inspections approach between DBI-DPH-Fire may improve housing conditions. While the city has developed more structured inspection processes for buildings that the City master leases, most private SROs are only inspected based on complaints. Some interviewees mentioned that city agencies could work with 311 to make sure that requests are better logged and responded to. It was noted that in some cases, judges dealing with DBI violations are more compelled to act in the City's favor when they see that DPH and Fire are also part of the complaint. It was mentioned that better coordination or integration between city agencies had been discussed before.

Photo Credit: San Francisco Chronicle/Lacy Atkins

Management Incentives & Support

As mentioned above, effective approaches to working with owners and managers generally have to entail "carrots and sticks" to incentivize private operators to maintain facilities that foster healthy living conditions. Some approaches that were mentioned include obtaining grant or loan funds to make repairs, providing culturally-appropriate owner/operator education on good business practices, or finding ways to save owners money by renting out ground floor retail or doing building energy upgrades. It was noted that trust is generally very low between City agencies and private SRO owners and operators. Successful engagement is often most effective when undertaken by stakeholders who understand the private SRO business model and can help find projects that benefit the owner and tenants, for example renting out the ground floor retain to generate revenue to make building improvements. Some felt that a management centered approach may contribute to improved housing conditions, while easing the operational challenges of running an SRO.

Photo Credit: San Francisco Chronicle/Mike Kane

Photo Credit: Central City SRO Collaborative

Outdated Housing

A number of respondents questioned when we should declare that an aging SRO has reached the end of its operational life. They noted that the challenges of maintaining this aging infrastructure required repairs should be weighed against today's standard design elements like individual bathrooms, kitchenettes, proper heating and ventilation, and desirable common spaces. Are there mechanisms to support rebuilding our aging SRO housing in way that does not displace residents?

Accessibility

The "silver tsunami" is coming and most our buildings are not amenable for aging in place. Interviewees mentioned problems like broken elevators and non-ADA compliant spaces make even the most basic functions like bathing, accessing food, and socializing a struggle for some residents. Recently a Grab Bar Ordinance was passed for SROs, and some mentioned that they are working with tenants to inquire about whether the ordinance has been enforced. Do we have the infrastructure to allow SF's residents in these buildings to age in place?

Violence

Violence and fear were other popular issues raised by respondents. Being subjected to violence, either directly or indirectly, physically or verbally, is a reality in many SROs. The issue of women's safety has been raised and in some hotels they have established female only floors. Children living in facilities with violent or predatory adults was also mentioned and even the presence of needles in hallways was noted as something that instilled fear. Fear of violence in the neighborhood is also common and was noted to prevent youth from traveling to positive community events after dark. Interviewees mentioned that generally everyone who lives in SROs recognizes that the status quo in some SROs is not acceptable. Some solutions offered by interviewees included educating

Photo Credit: UCSF/Susan Merrell

managers about the installation and use of surveillance cameras, clear tenant rules at the front desk, and employing residents as outreach workers to have a watchful eye and resolve conflicts.

Management-Tenant Relationships
Some key informants stated that cultural differences can lead to conflicts between owners/property managers and tenants. Managers may not have a good understanding of the structural and personal issues that their residents are contending with and are not informed of free resources that could contribute to a more compliant tenant.

Supportive Services
After building conditions, the need for more supportive services was the second most voiced concern. In our summarization supportive services encompass effective case management, successful movement and connection of individuals once they enter the system, continuing availability and access to services and enrichment activities, prevention of isolation, and maximization of eligible resources (County Adult Assistance Programs, Supplemental Security Income, CalFresh, etc.). The sub-themes below detail specific concerns and ideas that were raised in our interviews.

Photo Credit: San Francisco Chronicle/Lance Iversen

Case Management
Several people stated that Care Not Cash is successful in getting people off the street and into housing, but the support to ensure residents thrive while in housing has been insufficient. Some interviewees mentioned that residents would be disconnected from their social network on the streets and have a difficult time shedding the behaviors that they adopted while living outside, such as hoarding. Others mentioned that there are individuals that need to be connected to other supportive services such as In-home supportive Services or Adult Protective services. How can we make sure that people are connected to positive daytime activities and services to leverage the benefits of being housed and continuously improve residents' quality of life?

Social Interaction
One of the things we heard the most was that people are getting isolated in housing. People wanted both spaces for social interaction in housing facilities and the community as well as programming to engage

Photo Credit: San Francisco Chronicle/Theo Rigby

residents. Some mentioned the need for checking on people in their rooms, even if just by a maintenance worker. Other ideas for social interaction included opportunities for people to gather around memorials, traumatic events, difficult issues, and of course, celebratory occasions like birthdays and tenant occupancy anniversaries.

Successful Movement Through System
Like case management, informants noted that some residents come in and out of the system and may not connect with the proper supports to maintain housing and improve wellbeing. Can we find a cost effective way to facilitate how residents navigate the web of social and housing services to prevent them from dropping out and re-entering in a time of crisis? Several informants mentioned the availability of services, resident's willingness for self-care, and meeting unique client needs as barriers. Some respondents also mentioned the need to maximize benefit eligibility and enrollment because of the larger return on investment.

Tenant Empowerment
Individuals noted that empowering residents to improve their living conditions, particularly through peer-to-peer approaches, could play a role in recovery and improve the quality of life for other residents. Some successes include tenant councils and allowing tenants to share their stories with policy makers and peer organizing models to outreach to families in SROs to make sure that they were receiving social and health supports. Some focused on the value of meaningful work and pointed to examples like Hayes Valley Bakeworks that provides work to people with disabilities that are homeless or at risk. Others mentioned using tenants as community guides or helpers, similar to the Central Market Community Benefit District. Opportunities for appropriate physical activity were also noted as important for self-efficacy and empowerment.

Negative Feedback Loop
Several informants called out that when some of the city's most mentally and physically ill are housed in close proximity to each other, a culture of negative behaviors become normalized or difficult to resist. However, respondents noted that there are few options to de-concentrate persons with harmful behaviors. Some mentioned that making housing beautiful and comfortable resulted in far better health outcomes, even in hard parts of the city. Are there ways that a culture of self-care can prevail over a culture of drug-use and violence, and how can this be supported?

Housing Fit

The housing fit theme encompasses whether individuals are living in housing that meets their physical and mental needs and whether the City has a supply of housing to meet the needs within the population. The sub-themes below touch on conversations about persons living in poorly matched housing, issues with supply and sustainability of an appropriate housing stock, and means by which we can improve matching and sustainability.

Photo Credit: Housing Rights Committee of SF

Housing Matched to Ability

The theme housing match refers to an individual's ability to live successfully within a residence based on their physical, mental, or behavioral abilities. The elevator problem is already noted in the building conditions section of this report; however, many respondents noted this problem in the context of declining health and the need to transition individuals to housing deemed a good fit based on their physical and mental capacities to date, not seven ago when they might've first moved in. Interviewees noted that isolation because of the mismatch between a person's physical condition and their environment was leading to very problematic hygiene issues because residents were unable to leave their room to access bathrooms. We also heard that some severely mentally ill individuals struggle to live harmoniously in SROs, but that we don't have sufficient supportive housing for them. Their behaviors can be disruptive and harmful to their fellow residents. Can we better ensure that people are in housing that matches their physical and mental abilities?

Housing for Each Step in Stabilization

Interviewees mentioned the need for a tiered housing system where we have short-term transitional housing and then appropriate housing for individuals based on the level of support they need to be successfully housed. Some interviewees described the difficulty of finding housing for homeless individuals being discharged from the hospital and then finding a more difficult permanent housing placement process – noting that sometimes people just fall back into homelessness. Others wondered if there was a way to get better referrals for promising individuals living in SROs so that they could further advance in an environment with more wraparound services. Is our current system sufficient and can we make sure that people are transitioned to best-fit housing?

Assessment of Housing Needs
Some interviewees mentioned that the way we are currently assessing people's housing needs is not working. They mentioned that a better one page assessment could be done to continually evaluate whether a potential housing situation was optimal. Others mentioned that we need to be tracking what specific services and situations stabilize versus destabilize people to improve our placement and services. Can we more systematically evaluate and track clients so that they are receiving the housing and services that allow them to thrive most?

Family Housing
It was explained that in 2001 a report came out detailing the volume of families living in SROs. Changes were made to allow families in SROs to be classified as homeless so that they could continue to receive additional assistance. Family SRO buildings were also then inspected more regularly for health and safety hazards. Respondents mentioned that there has been some success in getting families into "family only" SROs, but there are still many families that are living in facilities with other tenants that have hazardous behaviors. Other issues mentioned were the lack of facilities to allow children to develop properly when there is not sufficient safe space to move. One respondent mentioned that a mother was worried that lack of space was impairing her child's motor skills development. Given the lifelong implications of growing up in an unsafe and overcrowded environment, what can we do to make sure that this issue continues to be addressed?

Housing as Healthcare
One interviewee mentioned that we currently have a "wrong pockets" situation because Medicare/Medical is reaping the financial benefits of their recipients being housed, but housing is not paid for as a healthcare intervention. This respondent noted that there are a few "right pockets" experiments in Illinois, where Medicaid reform will include permanent supportive housing. Can we have housing recognized as a healthcare intervention so that funding can be more sustainable?

Real Estate Pressures
Everyone is aware that the cost of renting residential or commercial space in San Francisco is rising at a rapid pace. Beyond just the challenge of affordability, interviewees touched on other issues related to real estate pressures from San Francisco's insufficient and aging housing stock. Stakeholders mentioned that residents who must live in SROs are subject to a number of abuses due to landlords wanting to prevent residency as well as difficulties upgrading buildings due to inability to take units offline or regulations that disincentivize rebuilding.

Tenant Protections
Many respondents mentioned that in some hotels residents are prevented from gaining residency through "musical rooms," where tenants are moved from one room to another to prevent them from gaining

resident rights after 30 days in a single room. Other issues mentioned were failure to give tenants adequate notice before a maintenance fix, lack of mailboxes and disruptive renovations that force tenants to move out so that hotels can attract more favorable tourist clientele. It was voiced that we need to do a better job of enforcing construction regulations to protect existing tenants. If SROs are the last, most affordable housing option, what can we do to address barriers to stability and tenant protection in some private hotels?

Photo Credit: David Baker + Partners Architects/Bruce Damonte

Unaffordable Rent

San Francisco's rents are skyrocketing and this was echoed as a major concern in many interviews. According to one interviewee, persons attempting to get housing in private hotels using SSI/SSDI are finding that that rent would cost up to 90% of their income, but have no other option because there is a long wait list for subsidized housing. Even some affordable housing like Mercy is unaffordable on the fixed income that some residents receive. One respondent recommended that the magnitude of the rising costs of SRO housing be studied further. In Chinatown some residents can get subsidies to move out of SROs, however, the cost of larger sized housing makes this prohibitive. In Chinatown in particular we heard that overcrowding is an issue, but that this is not the case in master leased units. Respondents also noted that rising commercial rents for non-profits and affordable businesses separates these services from the people who use them.

Supportive Housing Growth

We heard that while there has been some amazing new supportive housing built recently, we are currently in a steady state, even though need and value are ever present. It was mentioned that the dissolution of the Redevelopment Agency and lack of access to the Housing Trust Fund will make it difficult to grow more permanent supportive housing. One respondent mentioned that they didn't feel like growing PSH was considered as an important component in SF's ACA planning, even though it could be an important healthcare intervention.

Incentive to Improve Buildings

People mentioned that it is difficult to improve affordable SRO units/buildings for a number of reasons, including: difficulty taking units off line permanently or temporarily because of the housing shortage, the lack of monetary financing incentives because of loss of Redevelopment, and lack of protections for existing tenants to move back in if the whole building was gutted or rebuilt (similar to HOPE SF).

Residential Hotel Conversion Ordinance

It was mentioned that there is a need to update Chapter 41 of the Residential Hotel Conversion Ordinance to incentivize improvements. Some SRO buildings have reached the point where no amount of surface

repairs will make them a good place to live, but Chapter 41 makes it difficult to rebuild buildings in ways that increase their value and ultimately could improve livability for tenants. Can we incentivize owners to rebuild and retain SRO units while also adding additional valuable uses?

Photo Credit: San Francisco Chronicle/Brant Ward

Healthy Eating

A number of interviewees mentioned that access to fresh food and food storage and preparation equipment were important issues for residents living in SROs. The sub-themes below detail their comments on needs and solutions to food access issues and how food can also be a powerful tool to build a sense of community and wellness.

Cooking Facilities

Among the people we spoke with many respondents felt that open community kitchens often problematic, unless there were structures to manage cleanliness and safety; however, most agreed that residents should have access to personal refrigerators and microwaves unless otherwise indicated. However, some mentioned that the physical infrastructure was not there to power these devices. What can we do to ensure that all residents have food storage and preparation facilities?

Nutrition and Cooking Education

People mentioned that there were a number of good efforts going on to teach residents to cook without a stove, using microwaves, rice cookers, or electric woks. It was noted community organizations are working on cookbooks for SRO residents to teach them how to prepare affordable food in SRO rooms. People also mentioned the importance of teaching residents about healthy food in the process of teaching them how to cook.

Food Resources & Access

Food resources refers to the ability to secure sufficient financial resources to purchase enough nutritious food to support a healthy diet on a consistent basis while food access is the ability to obtain affordable, nutritious, and culturally appropriate foods safely and conveniently. Both were mentioned as important concerns. Some ideas were to bring food pantries into the lobbies of SROs, to get a full service grocery store in the Tenderloin, and to retain and attract restaurants that sell nourishing food for a low price.

Building Community with Food

Food was also mentioned as a way to build community and positive emotions. Holiday and communal meals were recommended, noting that the smells of good food can be healing and promote self-care.

Appendix 1:

Improving the Health of SRO Hotel Residents – 1st Rd. Interview Guide (~60 mins.)
Thank you for taking the time to meet with us. We're completing informational interviews with experts to better understand healthy SRO living. Using health impact assessment as our tool, we will work with stakeholders to **collectively** identify and analyze policies which can contribute to improved health for SRO residents. Part of this project is funded through a healthy community design grant from the Centers for Disease Control.

Guiding Questions:
What we want to know…

1. *What are the key health issues of SRO residents?*
2. *What are the optimal living conditions to ensure SRO residents are healthy? How can we improve the health of SRO residents?*

Specific questions:

1. Define the community you serve? Please describe.
2. What are the health and well-being results you want for the SRO community?
3. Generally, how would you assess the progress towards the health results you described (see #2)?
    a. Trends over the **past 10 years** (or more)
    b. Tell us about progress **today**
    c. **5 years from now**?
4. What is your organization doing (objectives and activities) related to SROs?
    a. What success has your organization had in improving the health of SRO residents?
5. What elements/projects/programs/policies in the SRO environment (defined as "inside the building") support the health of SRO residents? What does NOT support?

Support health of SRO residents	**Do NOT support** health of SRO residents

6. Who are your partners?
    a. City agencies / Non-profit / Private / Others
7. What framing advice do you have for reaching out to non-health agencies?
8. **Wish list.** Provide 3 wishes to advance health and well-being in SROs (e.g., people/orgs you want to work with, "wild ideas", etc.).
9. Any questions for us?

Appendix B: Top Policies Selected at Stakeholder Meetings

City and County of San Francisco
DEPARTMENT OF PUBLIC HEALTH
ENVIRONMENTAL HEALTH

POTENTIAL POLICY/PROGRAM SOLUTIONS FROM THE SFDPH HEALTHY SRO HIA ADVISORY COMMITTEE

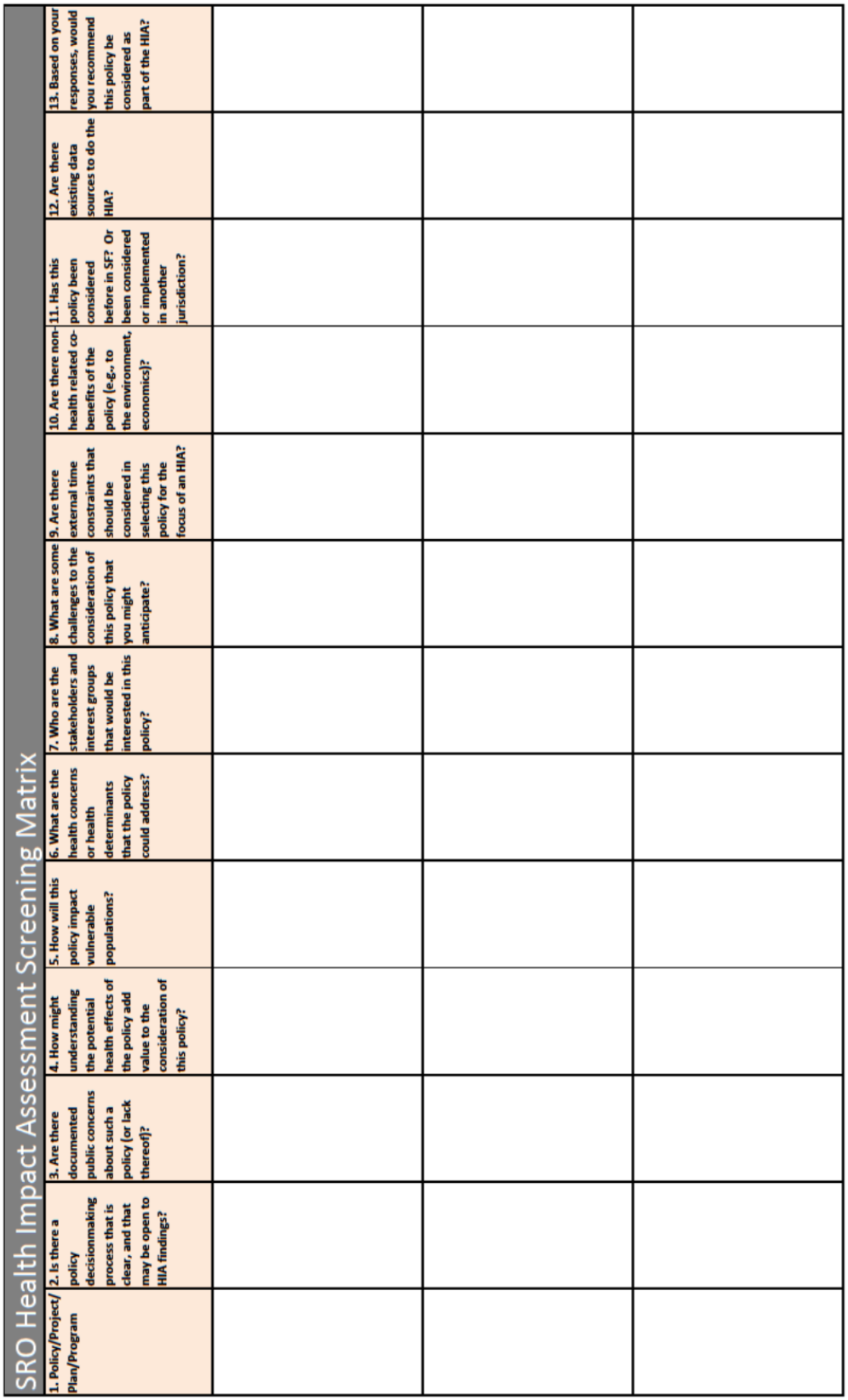
RANK	POTENTIAL SOLUTIONS	CITY DEPARTMENTS	TIMEFRAME[1]	HEALTH OUTCOMES[2]	ESTIMATED COST[3]
1	The City and County of San Francisco shall create and adopt a screening policy and associated tool for SRO hotel placement to ensure proper SRO and tenant housing fit.	SFDPH, DBI and HSA	Mid-term	PA, SC, MH, SI, EA, AC, FS, CD	Medium
2	The City and County of San Francisco shall propose legislation that requires the evaluation and retrofit for all SROs that could be potentially seriously damaged in a future probable earthquake and would result in the causalities and injuries for SRO tenants.	DBI and City Administrator's Office	1)Legislation – short term 2) Implementation – long term	MH, SI, EA	1)Low and 2) High
3	The City and County of San Francisco shall 1) propose legislation that eliminates family occupancy in SRO hotels and, 2) established adequate replacement housing and subsidy.	SFDPH, DBI, HSA, MO of Housing, SF Planning	1) Legislation short term – 2) adequate replacement housing – long term	SC, MH, SI, EA, AC, CD	1)Low and 2) High
4	The City and County of San Francisco shall create an elevator inspection program for SRO Hotels that would ensure operational elevators, proper renovation and maintenance and disability access and status in the event of a non-operational elevator.	SFDPH, DBI	Mid-term	PA, SC, MH, SI, EA, FS, CD	High
5	The City and County of San Francisco shall adopt "Minimum Standards of Care for SROs". The "Minimum Standards of Care" would be developed by a City Task Force and create a 'core set' of health protective measures, such as needle disposal boxes and hand sanitation that would be mandatory at all SRO hotels.	SFDPH, DBI and SF Planning	Short-term	SC, SI, EA, AC & CD	Low
5	The City and County of San Francisco shall create and adopt a safety and case management program that would be mandatory for all SRO Hotels	SFDPH and HSA	Long-term	PA, SC, MH, SI, EA, AC, FS, CD	High

[1]TIMEFRAME – Short-term < 1 year, Mid-term 1 – 3 years, Long-term > 3 years

[2]HEALTH OUTCOMES – PA = physical activity, SC = social cohesion, MH = mental health, SI = safety and injury, EA = equity and access, AC= Ambulatory Care Sensitive Conditions, FS = Food Security, CD = Communicable Disease

[3]ESTIMATED COST – Low < $1M, Medium $1M –$ 3M, High > $3M

Appendix C: Revised Screening/ Scoping Checklist



SRO Health Impact Assessment Screening Matrix													
1. Policy/Project/ Plan/Program	2. Is there a policy decisionmaking process that is clear, and that may be open to HIA findings?	3. Are there documented public concerns about such a policy (or lack thereof)?	4. How might understanding the potential health effects of the policy add value to the consideration of this policy?	5. How will this policy impact vulnerable populations?	6. What are the health concerns or health determinants that the policy could address?	7. Who are the stakeholders and interest groups that would be interested in this policy?	8. What are some challenges to the consideration of this policy that you might anticipate?	9. Are there external time constraints that should be considered in selecting this policy for the focus of an HIA?	10. Are there non-health related co-benefits of the policy (e.g., to the environment, economics)?	11. Has this policy been considered before in SF? Or been considered or implemented in another jurisdiction?	12. Are there existing data sources to do the HIA?	13. Based on your responses, would you recommend this policy be considered as part of the HIA?

Appendix D: Literature Review of Health Impacts

Literture Review for SRO Health Impact Assessment

Health Outcome Mentioned	Relevance to SRO HIA policy	Peer-Reviewed?	URL	Title	Publication Year	Source (Journal / publishing organization)	Geographic Focus
Recommendations address: Stress, Nutritional Needs, Mental Health, Child Development	population profile	N	https://	Report on Families With Children Living In Single Room Occupancy Hotels In San Francisco	2001	SF SRO Health and Safety Task Force	SF
health services utilization	population profile	N	http://	San Francisco's Single-Room Occupancy (SRO) Hotels: A Strategic Assessment of Residents and Their Human Service Needs	2009	Aimée Fribourg / SFHSA	SF
n/a	population profile	N	https://	Report on the Census of Families with Children Living in Single Room Occupancy Hotels in San Francisco	2001	The Citywide Families in SROs Collaborative	SF
asthma, tuberculosis, lead poisoning, infection, accidental injury	population profile, focus on violations of the Health Code (Insect and Rodent Infestation, Unsanitary Conditions, Noise Disturbances and Second Hand Smoke Exposure) and Lack of Heat (a violation of the Housing Code).	N	http://	Substandard Housing Conditions in San Francisco Chinatown: Health Impacts on Low-Income Immigrant Tenants	2005	Chinese Progressive Association	SF - Chinatown
Recommendations address: safety/violence, nutrition, emergency preparedness	population profile	N	http://	Seniors and Adults with Disabilities in SROs: Survey and Recommendations	2012	SRO Collaboratives	SF
n/a	population profile, recommendations address training SRO desk clerks	N	https://	We Are Tenants Too! The San Francisco Report on SRO Vistor Rights	2004	Mission SRO Collaborative	SF - Mission
n/a	presents range of possible responses to housing code violations	N	http://	Healthy Housing Laws that Work. Creating Effective Implementation & Enforcement Clauses.	2014	ChangeLab Solutions	USA
n/a	addresses inspection frequency, tenant code violations, and monitoring of substandard properties	N	http://	A Guide to Proactive Rental Inspection Programs	2014	ChangeLab Solutions	USA
Chronic Health Conditions (physical and mental), correlation between physical condition of SROs and health status of residents	correlation between poor housing conditions and poor health	Y	http://	The Relationship Between Housing Conditions and Health Status of Rooming House Residents in Toronto	2003	Canadian Journal of Public Health	Toronto, ON, Canada
General health, Respiratory health, Musculoskeletal conditions	health effects of improving housing	Y	http://	The Watcombe Housing Study: the short term effect of improving housing conditions on the health of residents	2007	Journal of Epidemiology & Community Health	Torquay, England, UK
Physical health, Mental health, Substance dependance, Cognitive functioning, Viral exposure	prevalence of health issues in population	Y	http://	The Hotel Study: Multimorbidity in a Community Sample Living in Marginal Housing	2013	American Journal of Psychiatry	Vancouver, BC, Canada
Mental health diagnosis, Chronic health conditions, Healthcare access	prevalence of health issues in population ; comparison of health issues in homeless and marginally housed	Y	http://	A cross-sectional observational study of unmet health needs among homeless and vulnerably housed adults in three Canadian cities	2013	BioMed Central / BMC Public Health	Vancouver, BC, Toronto, ON, & Ottawa, ON, Canada
n/a	summarizes staff support for trainings around responding to hostel residents / unique population needs	N	http://	The Future of Hostels for Homeless People	2001	Scottish Executive Central Research Unit / Homelessness Task Force	Scotland, UK
lead poisoning, injury, asthma/respiratory health, cancer	presents # of studies by intervention level and objectives, and whether there were quantitative health-related goals	Y	http://	Healthy Housing: A Structured Review of Published Evaluations of US Interventions to Improve Health by Modifying Housing in the United States, 1990–2001	2003	American Journal of Public Health	USA
General health, Respiratory health, Cardiovascular health, Obesity, Lead Poisoning	Links trends in housing characteristic changes to possible health impacts	Y	http://	The Relationship of Housing and Population Health: A 30-Year Retrospective Analysis	2009	Environmental Health Perspectives	USA
Physical health, Mental Health, Respiratory Health, Health Risk Behaviors	summarizes quantified and observational evidence connecting housing improvements and health	Y	http://	Health impact assessment of housing improvements: incorporating research evidence	2002	Journal of Epidemiology & Community Health	USA
n/a	addresses owner/manager stress and management practices	N	http://	Anyone can live in a boarding house, can't they? The advantages and disadvantages of boarding houses	2013	MPH thesis at University of Otago	New Zealand

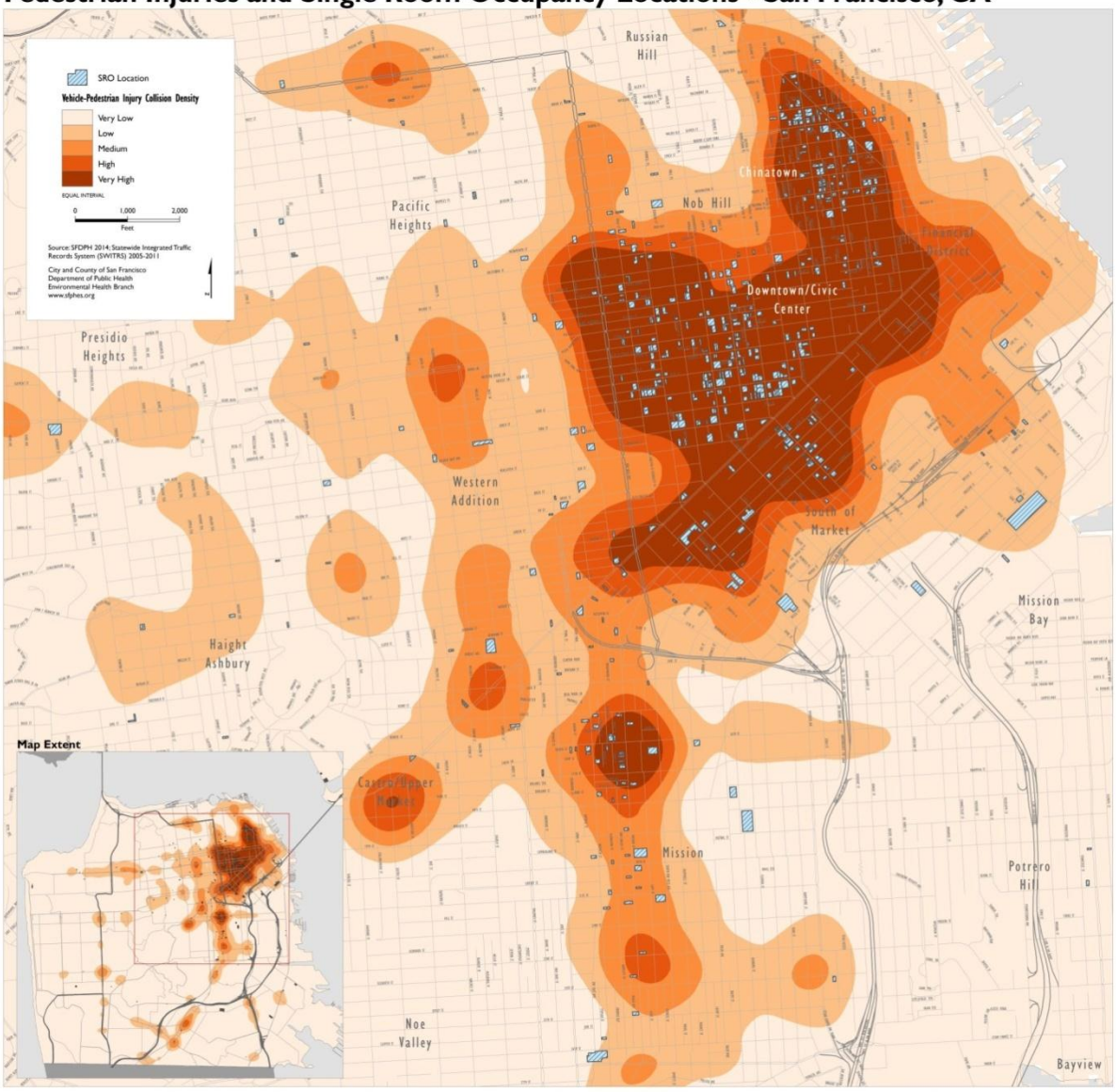
n/a	addresses staff and services, relations between residents, and resident rights and responsibilities, as well as regulatory targets	Y	http://v	Harmonising Hostel Standards: Comparing the UK and Poland	2007	European Journal of Homelessness	UK and Poland
n/a	summarizes survey responses on management practices from 94 tenants and 15 owners	N	http://v	Out of the Long Dark Hallway: Voices From Winnipeg's Rooming Houses	2002	University of Winnipeg	Winnipeg, ON, Canada
n/a	highlights tenant and landlord themes	N	http://v	Good Practices in Rooming Houses	2011	Homelessness Partnership Strategy, Homelessness Knowledge Development, Human Resources and Skills Development Canada	Canada
n/a	context of SRO residents	N	http://v	People Who Live in Hotels: An Exploratory Overview. Ethnographic Exploratory Report #23	2006	U.S. Census Bureau	USA
n/a	summarizes structural and maintenance standards, duties of owners and occupants	N	http://v	National Healthy Housing Standard	2014	APHA & National Center for Healthy Housing	USA
self-reported overall health, mental health	population profile	N	http://v	Hidden but not forgotten. The experiences of hostel residents.	2001	Crisis (nonprofit org)	UK
Psysiological Health Risks, Mental Health Stressors, Community Protective Factors, Building Safety		N	http://c	Housing and Health: New Opportunities for Dialogue and Action	2014	ChangeLab Solutions and partners	USA
n/a	anecdotal success of enforced SRO standards in reducing resident complaints	N	http://v	Residential Hotels in Central Oakland	2004	City of Oakland Community & Economic Development Agency	Oakland, CA
asthma, stress/mental health	theory of how physical and emotional housing conditions cause stress	Y	http://v	When home is where the stress is: expanding the dimensions of housing that influence asthma morbidity	2006	Archives of Disease in Childhood	USA and UK
mental health/depression/stress	health effects of improving housing and social services	Y	http://v	Stressors, resources, and distress among homeless persons:: a longitudinal analysis	2001	Social Science & Medicine	Northern California
mental health		Y	http://v	Housing quality and mental health	2000	Journal of Consulting Clinical Psychology	
illness episodes, healthcare utilization, self-reported mental and overall health, preceived safety	review of quantified studies on health effects of improving housing	Y	http://v	Health effects of housing improvement: systematic review of intervention studies.	2001	The BMJ (formerly The British Medical Journal)	UK
n/a	focuses on disconnect between building inspections for durability/affordability and EH inspections for vector-based risks	Y	http://v	A qualitative review of housing hazard assessment protocols in the United States	2005	Environmental Research	USA
respiratory health	effect of damp and mold on respiratory health	Y	http://v	A measure for quantifying the impact of housing quality on respiratory health: a cross-sectional study.	2012	Environmental Health	New Zealand
degree of mental distress, chronic illness	effect of damp and housing conditions on mental health/stress	Y	http://v	Housing conditions and mental health in a disadvantaged area in Scotland.	1996	Journal of Epidemiology & Community Health	Scotland, UK
n/a	reliability of scale to assess hoarding/clutter/cleaniness/squalor	Y	http://v	The Environmental Cleanliness and Clutter Scale (ECCS).	2009	International Psychogeriatrics	
mental health, healthcare utilization, quality-of-life	review of effects of housing interventions on health of people with severe and persistent mental illness	Y	http://v	Effects of housing circumstances on health, quality of life and healthcare use for people with severe mental illness: a review.	2008	Health & Social Care in the Community	
n/a	effect of intervention on housing conditions	Y	http://v	The Watcombe housing study: the short-term effect of improving housing conditions on the indoor environment.	2006	Science Total Environment	UK
n/a	success of better integrated social services, housing inspections/improvements, and data	Y	http://v	Bringing health home: householder and provider perspectives on the healthy housing programme in Auckland, New Zealand.	2008	Social Science & Medicine	Auckland, New Zealand
	review of effects of housing interventions on health	Y	http://v	A systematic review of housing interventions and health: introduction, methods, and summary findings.	2010	Journal of Public Health Management Practice	
mental illness, schizophrenia, substance abuse, service utilization	review of correlation between housing attributes and mental illness	Y	http://r	Housing Attributes and Serious Mental Illness: Implications for Research and Practice	2001	Psychiatric Services [journal]	

asbestos, CO, general safety, lead, fire safety, pests, social net	summarizes main points of intervention into housing regulations from PH perspective and specific health risks	?	http://	Housing and health regulations in Europe: Final Report.	2006	World Health Organization	EU
physical, chemical, biological risks ; social conditions ; building factors	assesses evidence base for effects of housing condition on health	?	http://	Report on the WHO technical meeting on quantifying disease from inadequate housing	2006	World Health Organization	
		?	http://	Is housing improvement a potential health improvement strategy?	2005	World Health Organization	EU
example of housing policy HIA		N	http://	Health Impact Assessment of Liverpool City Council's Housing Strategy Statement	2003	Included as an example of a Housing HIA on WHO's website	Liverpool, England, UK
		Y	http://	Economic analysis of the health impacts of housing improvement studies: a systematic review	2013	Journal of Epidemiology & Community Health	
		Y	http://	Housing Improvements for Health and Associated Socio-economic Outcomes: A Systematic Review	2013	The Cochrane Library	
summary doc - example of housing policy HIA		N	N:/Hea	Health Impact Assessment of Code Enforcement Policy, Marin County	2011-2012	Human impact Partners & Legal Aid Society of Marin	Marin County, CA
example of housing policy HIA		N	N:/Healthy%20SRO%20HIA/LitertureReview/CA-Marin-Healthy-Homes.pdf		2012	Human impact Partners & Legal Aid Society of Marin	Marin County, CA
		Y	http://	Exploring the relationships between housing, neighbourhoods and mental wellbeing for residents of deprived areas	2012	BioMed Central / BMC Public Health	
		?	http://	Environmental burden of disease associated with inadequate housing. Methods for quantifying health impacts of selected housing risks in the WHO European Region	2011	Word Health Organization	EU
example of housing policy HIA		N	http://	Assessing the Health Impacts of Glasgow's Local Housing Strategy 2011-2016: scoping	2010	Glasgow Centre for Population Health	Glasgow, Scotland, UK
example of housing policy HIA		N	http://	HIA of the Leeds Landlord Accreditation Scheme	2007	Leeds Primary Care Trust	Leeds, England, UK
example of housing policy HIA		N	http://	Health Impact Assessment of the proposed Wales Agent and Landlord Licensing Scheme	2015	Welsh Government Social Research	Wales, UK

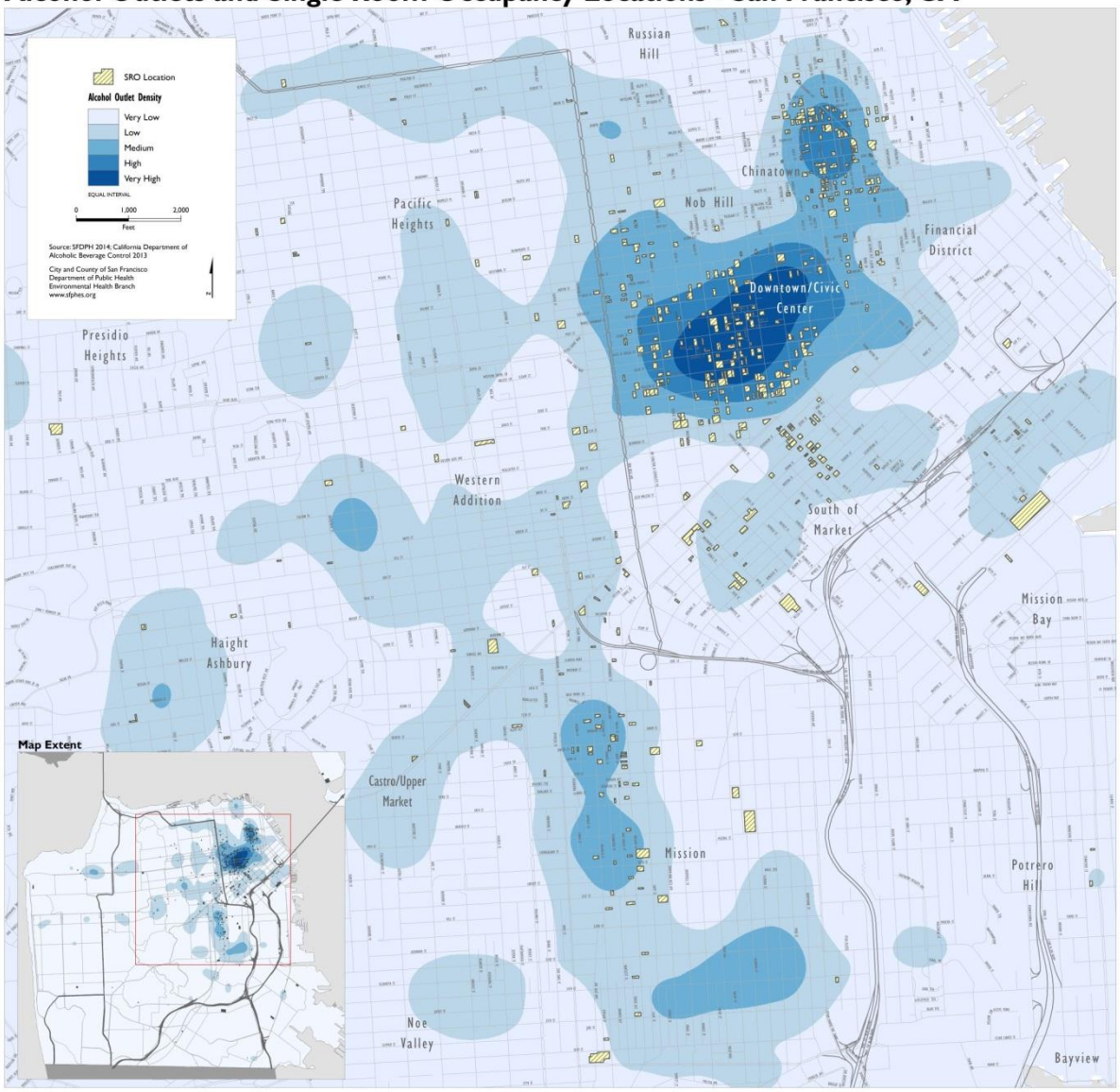
Appendix E: Geographic Analysis of Surrounding Neighborhood Characteristics

Single Room Occupancy Location Density - San Francisco, CA

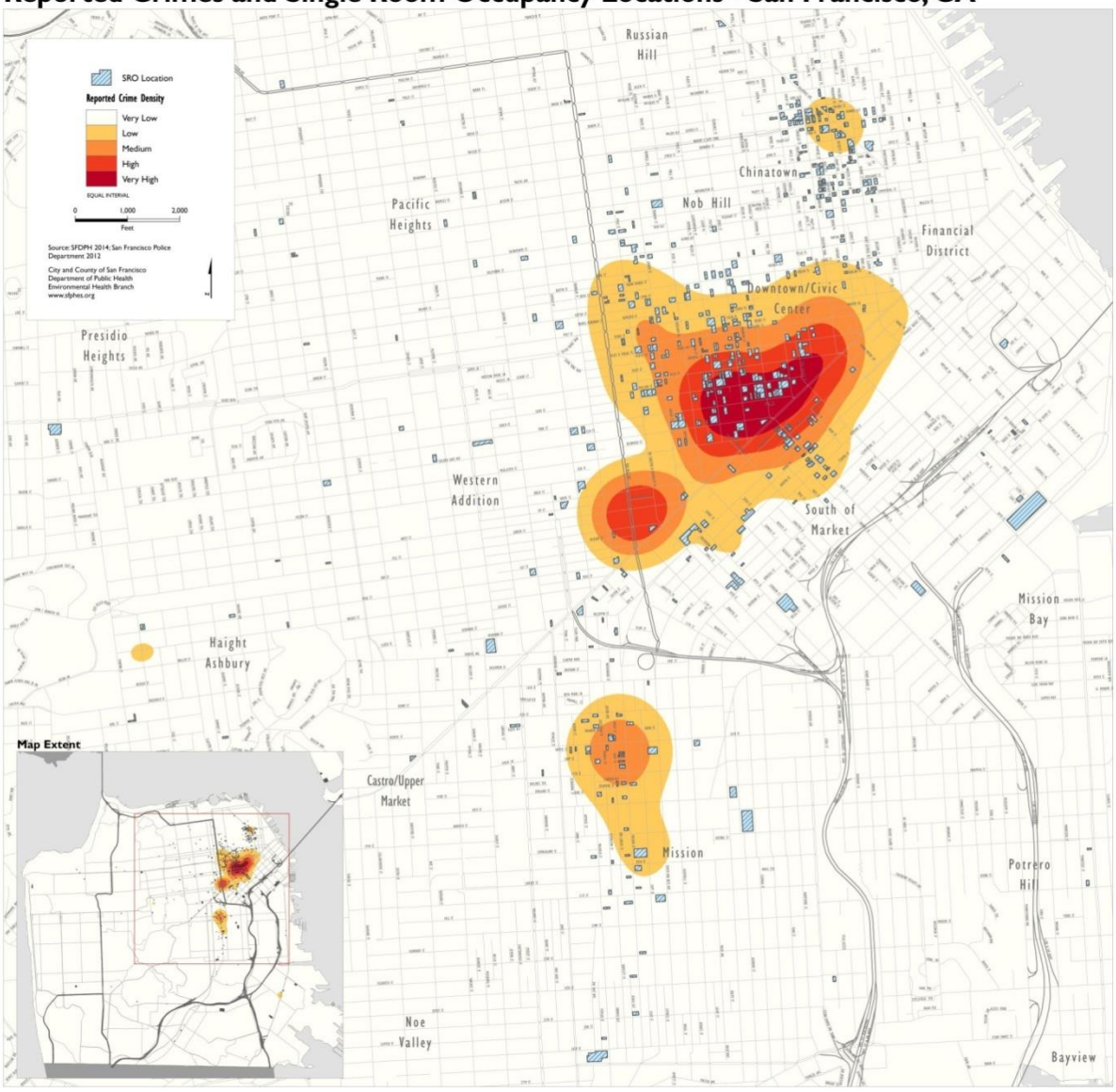
Pedestrian Injuries and Single Room Occupancy Locations - San Francisco, CA



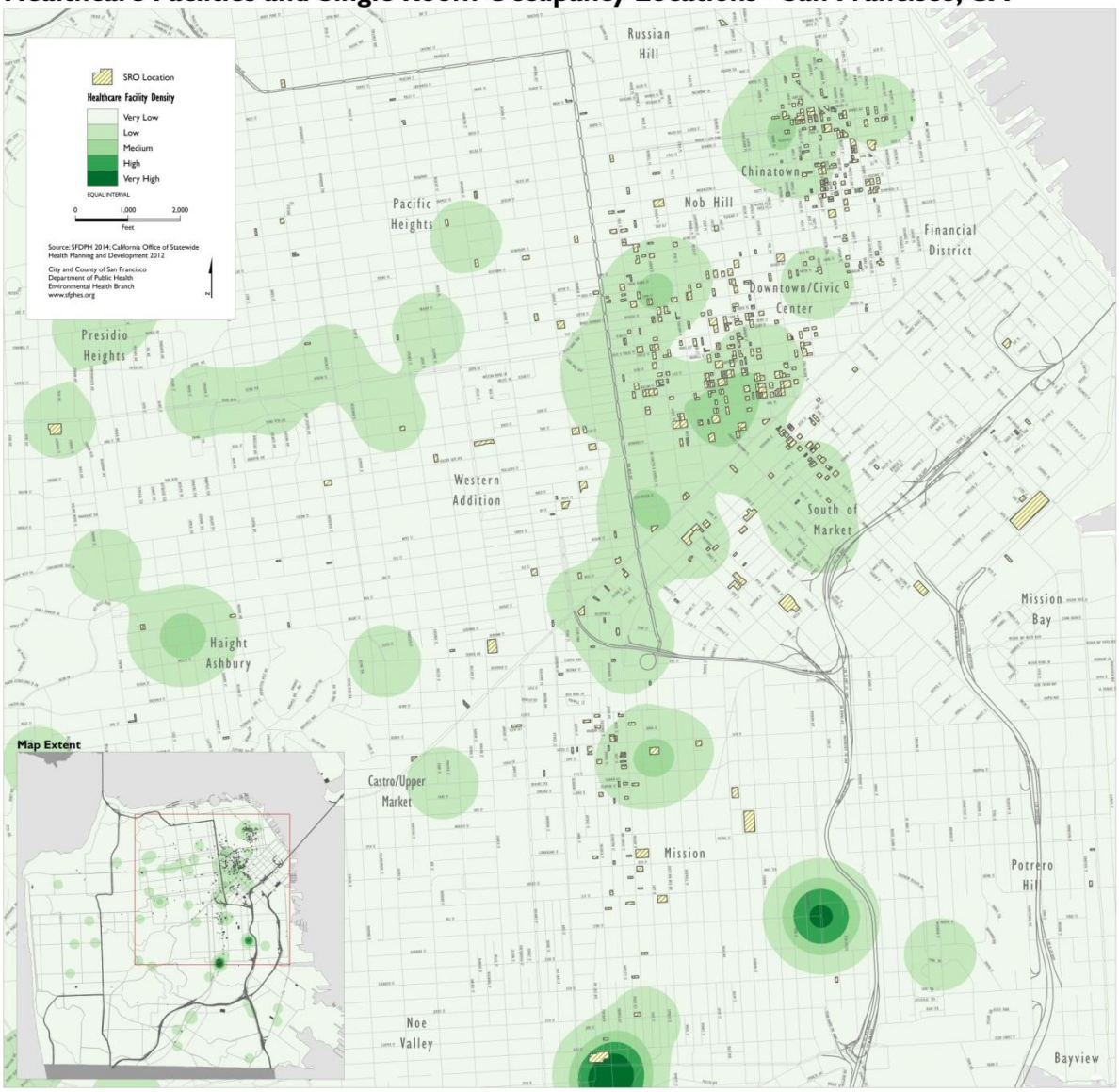
Alcohol Outlets and Single Room Occupancy Locations - San Francisco, CA



Reported Crimes and Single Room Occupancy Locations - San Francisco, CA

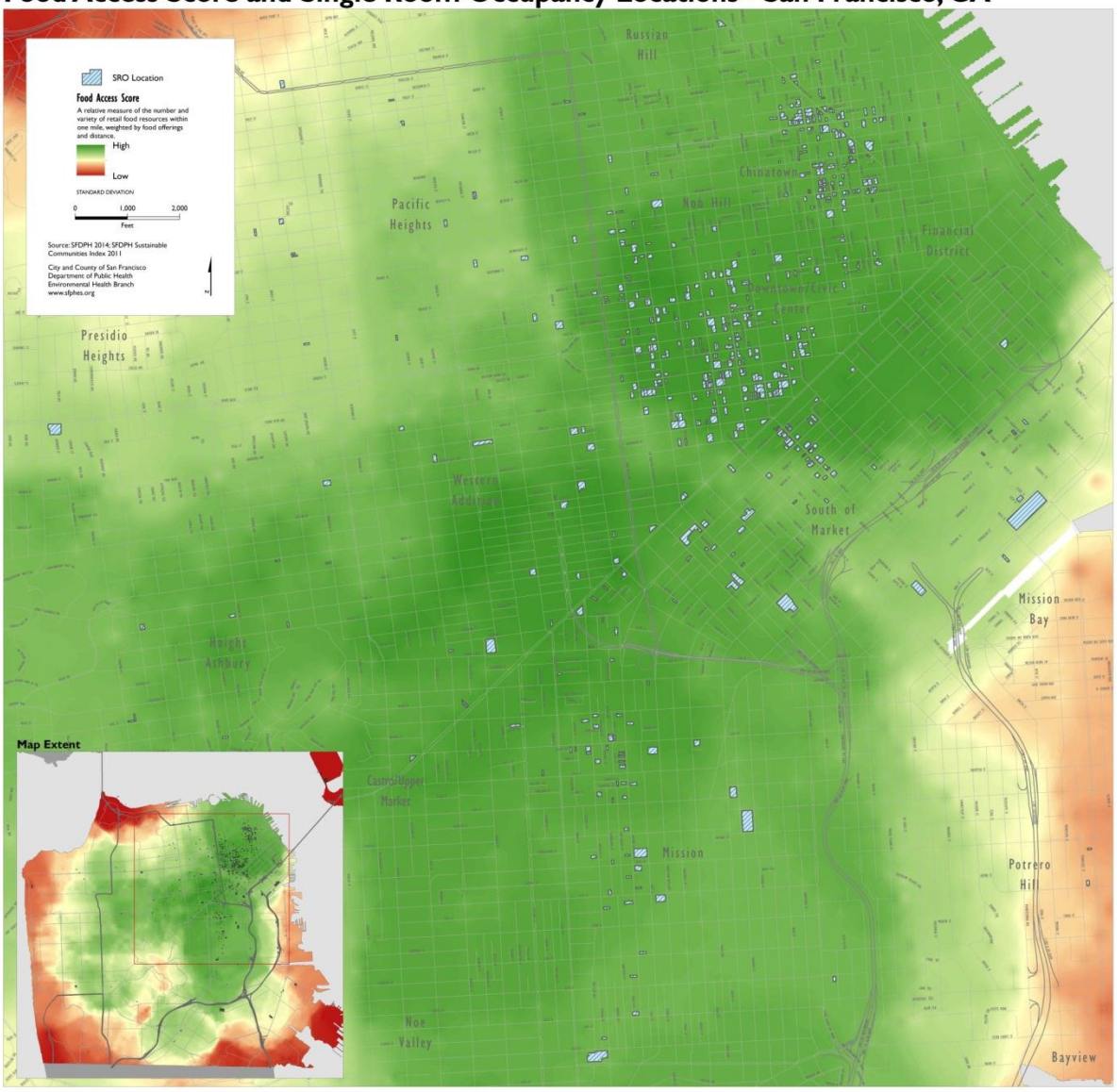


Healthcare Faclities and Single Room Occupancy Locations - San Francisco, CA

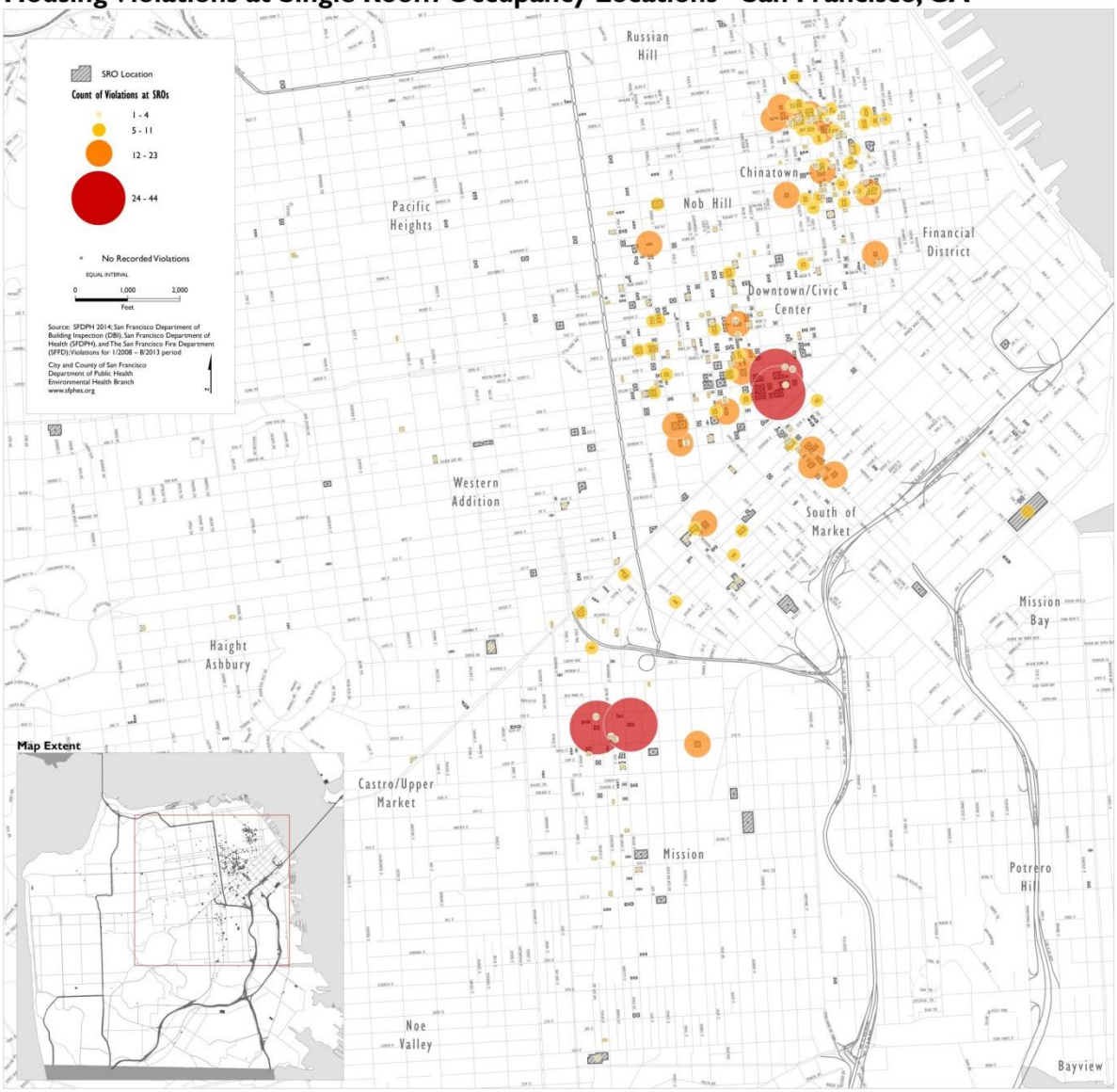


Rent Burden and Single Room Occupancy Locations - San Francisco, CA

Food Access Score and Single Room Occupancy Locations - San Francisco, CA



Housing Violations at Single Room Occupancy Locations - San Francisco, CA



Appendix F: Recruitment Script with Questions on Focus Groups

Script for outreach calls to potential participants

Revised: 2-17-15

DPH: Hello, this is Danielle Boulé from the Department of Public Health. I'm calling because the Health Department is setting up focus groups and interviews with individuals who deal with property maintenance at SROs. We're trying to understand how we at the Health Department can better support owners, operators and tenants living in SROs. [Person] shared your contact information with me given your role at [SRO name]. Just to confirm, are you the property manager [or owner, etc.] at [SRO name]?

Potential Participant: Yes [no].So why are you doing these focus groups?

DPH: The goal is to understand the attitudes, practices, and opinions of SRO Property managers. This is an opportunity to voice your opinion on resources and trainings that can help improve your work environment.

Potential participant: How will the information be used?

DPH: The analysis from these interviews/focus groups will result in a summary report describing the themes that emerged. The report will be shared with all participants upon its completion. The report will be part of a larger assessment that was requested by the Health Commission. The assessment may result in policy recommendations, education, and resources to help both SRO operators and tenants.

Potential participant: Will my name be used in the report?

DPH: No, participants' names and personal data will not be used in this assessment. The interview will not be recorded.

Potential participant: What's the time commitment?

DPH: The focus group will take an hour and a half. Participants will be compensated with food and a $50 gift certificate. The focus group will be held on [date], from [time] at [location.]

Appendix G: SRO Operator Focus Group Questions

SRO OPERATOR INTERVIEWS/FOCUS GROUPS

Last revised: 2-25-2015

Participants: SRO operators/owners/site managers: anyone who deals with property maintenance. Focus is on private operations but if we have interest from non-profit sector, we'll hold a separate focus group.

Number of focus groups: 2 total- 1 for private operators, 1 for public

Size of focus groups: 8-10 participants per group, about 20 people total

Recruitment: Work through existing relationships with collaboratives/task forces/CBOs to secure participation.

Logistics: location-TBD, time-TBD, duration-1.5 hour, food to be provided, $50 incentives handed out at end

Staffing: 1 facilitator, 1 note taker

Objectives of focus groups: Identify operators' knowledge, attitude, and perceptions of control related to: 1. Problematic housing conditions/violations, 2. housing's impact on health and 3. Manuals, trainings, and/or additional resources related to SRO operations and specifically, tenant health.

FOCUS GROUP SCRIPT

Introduction(10m)

The San Francisco Department of Public Health is conducting interviews and focus groups with individuals who manage property maintenance in SROs. The goal of these interviews and focus groups is to better understand how the San Francisco Department of Public Health can better support owners, operators, and tenants living in SROs.

This assessment was requested by the Health Commission, the Department of Public Health's governing body, to help improve the health of tenants living in SROs. The aim of the interviews and focus groups is to understand the attitudes, practices, and opinions of SRO property managers. This information may be used to support policy recommendations, education, and resources to help both SRO operators and tenants. This is an opportunity to voice your opinion on resources and trainings that can help improve your work environment.

Your name, personal data, and the name of your SRO will not be used in this assessment. We ensure that the information you provide us with will not be in any way related to your identity. Participation in the assessment is voluntary. Participation means the following: 1. I will participate in the discussion carried out in the form of a focus group, which will last for about an hour and a half and is led by a facilitator. 2. I do not have to use my name in the focus group; instead of my actual name I can give the facilitator a code name to be used in the survey. 3. The focus group will not be recorded.

The analysis from the interviews andfocus groups will result in a summary report describing the themes that emerged. The report will be shared with all participants upon its completion.

To make up for any inconvenience and compensate you for your time, volunteers will receive a $50 gift card at the end of the focus group. Feel free to get up and use the bathroom whenever you'd like during this interview. The bathrooms are located. . . . .

Facilitator (F): So we can all get a sense of who's in the room, can you share a few things about yourself? 1. Your first name or a code name you'd like to use, 2. How long you've been an operator or owner, 3. The neighborhood where your SRO is located, and 3.Your favorite thing about San Francisco.

[Time for intros]

F: Let's start off with a broad question about the impact of SROs. What impact do you think SROs have on tenants and the surrounding community?"

*[If feedback does not include positive impact, ask: "What about some ways that SROs have a **positive** impact on tenants and the surrounding community?" Things to mention if not brought up: affordable housing for people who can't afford longer-term leases, less people on the streets, community within the buildings, etc.]*

F: Given that SROs provide an important source of affordable housing in San Francisco, we're trying to understand more about your role, experiences, and perspectives as operators [or owners] in order to improve city services that support you and your tenants. We are here to learn from you today; you are the expert on your job and experiences.

The first element of SRO conditions and operations that we'd like to learn about from you is relates to housing codes and conditions.

Codes, enforcement and housing conditions [25 min]

F: We recognize that there are many building, fire, and health codes that yourbuildings are expected to comply with.

- Can you tell me about your understanding of the conditions the SRO building must be in in order to be compliant with building, fire, and health codes? (Knowledge-of standards they're held to under the law)
- How do you get information about what is expected? [probe about times when they were confused or didn't have information] (Knowledge- of resources they access to get information)

- What are your thoughts on the inspection process? (Knowledge and attitudes-re: the inspection and abatement process)

F: Staying on the topic of housing codes, we know that some of the most common violations are related to insect and animal infestations, like cockroaches, mice, and bedbugs, as well as mold, and maintaining garbage areas. *[Have these written on a flip chart.]*

- Can anyone share a 'success' story of when they had a problem with insect and animal infestations (mice, rats, bedbugs, cockroaches), mold, or garbage but then were able to fix the problem (i.e. get rid of vectors, mold, or garbage)?"*[Ask for more examples. Probe for the resources they accessed to address the problem]*(Knowledge, attitudes, and perceived control- related to managing housing conditions)
- What are the challenges, if any, that you face while trying to deal with these issues? (Attitudes and perceived control- related to managing housing conditions)

Housing and health (15m)

F: Now that we talked a bit about housing codes and conditions, we'd like to learn about the health of residents and people who work in SROs.

- How would you describe the general health of your tenants? (Knowledge/awareness, could get at attitudes as well- of tenants' health)
- How, if at all, do you think housing and living conditions impact the health of SRO residents? (Knowledge- of relationship between housing and health)
- To get more detailed, have you ever noticed any specific health issues occurring because of these issues *[point to violation categories. If operator lives on-site, ask about any health effects they've experienced.]*?(Knowledge- of relationship between housing and health)
- While it's not an expected job responsibility of yours, does anyone have an example of when they helped a tenant with a health issue? [Attitudes and perceived control- related to the operator's ability to potentially impact tenants' health]

Manuals/trainings/other resources (15m)

Lastly we want to talk a bit about the resources that you all use to ensure that things run smoothly at your buildings. We know it's a tough job, so we want to figure out what gaps there are in support for SRO operators.

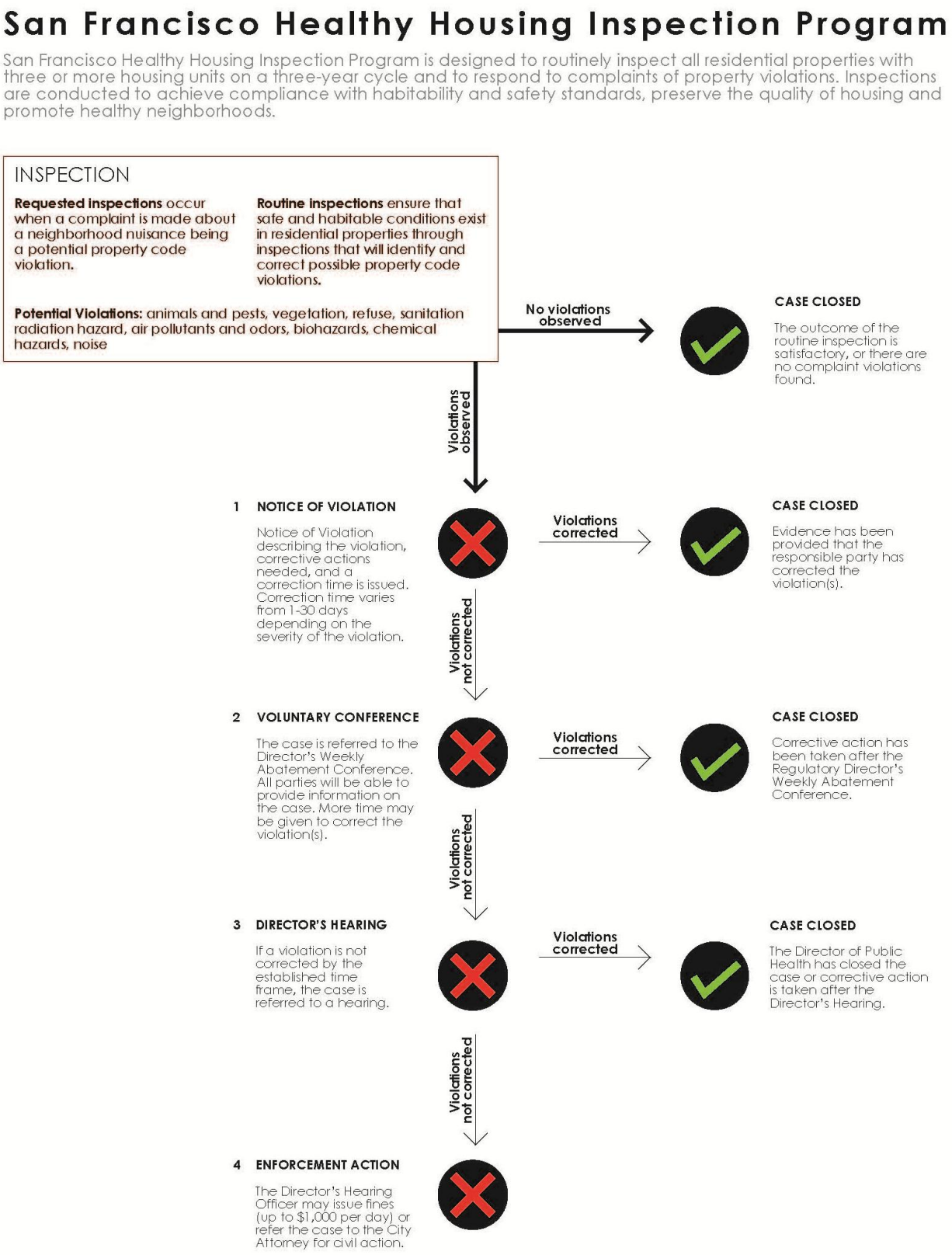
- Have you received any manuals or guides related to SRO operations? If yes,
    - Which ones? (Knowledge)
    - What was/wasn't useful? (attitudes)
    - Do you have any ideas about how the manual could be more useful to you? Do you have any suggestions regarding what type of manuals or information that would be useful to you?
- Have you participated in any training classes related to SRO operations? If yes,
    - Which ones? (Knowledge)
    - What motivated you to attend the trainings? (attitudes)

  - What was/wasn't useful? (attitudes)
  - Did you do anything differently as a result of the training? (self-reported behavior change)
  - Do you have any ideas on what could make the training more useful to you? Are there any topics that you'd like to know more about? Any resources you'd like to learn about? (Attitudes and perceived control-is the knowledge applicable and relevant?)
- Do you feel like you have all of the resources you need to keep your SRO in good condition (free of mold, vectors, and refuse)? If not, what other resources would be useful? Resources could mean trainings, financial assistance, assistance from mental health professionals, faster response from police, etc. (Attitudes and perceived control- do they feel equipped to maintain desirable housing conditions? Do they have the support they need from involved agencies? Etc.)
- Similarly, do you feel like you have all of the information and/or resources you need to support tenants? If not, what other resources would be useful? (Attitudes and perceived control- do they feel equipped to support tenants? Do they have the support they need from involved agencies? Etc.)
- Is there anything that the Health Department can do to better support you? (Attitudes- about DPH and its ability to provide support, and perceived control- as it relates to support from DPH)

Thanks and next steps (5m)

Thank you so much for taking the time to participate in this focus group. We'll be using this information to gain a better understanding of what resources might be helpful to you and your tenants. Do you have any questions for me? If you do have any questions or want to talk more about the process, I can be reached at *[write my info on the flip chart.]* Thanks again. *[Hand out gift certificates.]*

Appendix H: SFDPH Building Inspection Process Diagram



Appendix I: Key Stakeholders

Baker Hotel
Cadillac Hotel
Caritas Management Corporation
Central City SRO Collaborative
Chinatown Community Development Center
Chinatown SRO Collaborative
Community Housing Partnership
Conard House
Dolores Street Community Services
Episcopal Community Services SF
Hooshmand Law Group
John Stewart Company
Mission SRO Collaborative
Private SRO building contractor
Sam Patel, 250 Kearny St. LLC
San Francisco Adult Probation Department
San Francisco City Administrator's Office
San Francisco Department of Building Inspections
San Francisco Department of Public Health
San Francisco Department of the Environment
San Francisco Fire Department
San Francisco Human Services Agency
San Francisco Mayor's Office on Disability
San Francisco Municipal Transportation Agency
San Francisco Office of Economic and Workforce Development
San Francisco Planning Department
San Francisco Police Department
San Francisco, The Office of Mayor Edwin Lee
San Francisco, The Office of Supervisor Campos
San Francisco, The Office of Supervisor Chiu
San Francisco, The Office of Supervisor Kim
San Francisco Public Utility Commission
San Francisco, The Office of the City Attorney
Tenderloin Housing Clinic
Tenderloin Neighborhood Development Corporation
Urban Solutions
Women's Community Clinic

Endnotes

[i] Central City SRO Collaborative. SRO History in San Francisco.Retrieved from http://www.ccsro.org/pages/history.htm.
[ii] ibid
[iii] Fribourg, Aimee. San Francisco's Single-Room Occupancy Hotels: A Strategic Assessment of Residents and their Human Service Needs. A Study Conducted for the San Francisco Human Services Agency. Spring 2009.
[iv] Groth, Paul. *Living Downtown: The History of Residential Hotels in the United States*.Berkeley and Los Angeles: University of California Press. 1994.
[v] Fribourg, Aimee. San Francisco's Single-Room Occupancy Hotels: A Strategic Assessment of Residents and their Human Service Needs. A Study Conducted for the San Francisco Human Services Agency. Spring 2009.
[vi] ibid
[vii] ibid
[viii] San Francisco Department of Public Health.Improving Health in SROs Health Impact Assessment: Key Informant Interview Summary. February 2014.
[ix] San Francisco Health Commission. (2014). Health Commission Resolution 13-09: Resolution Supporting a Health Impact Assessment of Food Security for Residents of Single Room Occupancy Hotels. Retrieved from: https://www.sfdph.org/dph/files/hc/HCRes/default.asp.
[x] San Francisco City Attorney's Office. (2014). Herrera sues City-contracted SRO hotel owners for rampant housing violations, false claims [Press release]. Retrieved from http://www.sfcityattorney.org/index.aspx?page=595.
[xi] San Francisco City Attorney's Office. (2014). Herrera sues contractor for exposing residents, unlicensed workers to asbestos and lead [Press release]. Retrieved from http://www.sfcityattorney.org/index.aspx?page=611.
[xii] Szeto, Andrew. "Kim, Activists Seek SRO Elevator Fix." *Beyond Chron*24 Jun. 2014.Retrieved from: http://www.beyondchron.org/kim-activists-seek-sro-elevator-fix/.
[xiii] Agency for Healthcare Research and Quality.Prevention Quality Indicators Overview.Accessed March 9, 2015. Available at: http://www.qualityindicators.ahrq.gov/modules/pqi_resources.aspx