



CRACKING THE CODE

Zoning and Code Reform in San Jose's Urban Growth Areas

SPUR White Paper

Released on November 13, 2015

SPUR Staff: Benjamin Grant, Kristy Wang

Task Force Members: Jeff Berg, Margo Bradish, Steve Cox, Andrew Crabtree, Jeff Current, Thang Do, Nate Echeverria, Bill Ekern, Frank Fuller, Drew Hudacek, Mike Kim, Jerry King, Nanci Klein, Ellen Lou, Jeff Oberdorfer, Steve Piasecki, Kelly Snider, Tim Steele, Case Swenson, Kevin Wilcock, Geri Wong

Thank you to the stakeholders and city departments that provided review and comments: Walter Armer; Josh Burroughs; San Jose District 3 Councilmember's Office; San Jose Downtown Association's Downtown Design Committee; San Jose Department of Planning, Building and Code Enforcement; San Jose Department of Parks, Recreation and Neighborhood Services; San Jose Department of Public Works; San Jose Department of Transportation; San Jose Economic Development Department; San Jose Fire Department; San Jose Mayor's Office; Rob Steinberg.

Additional thanks to Frank Fuller and Jane Lin of Urban Field Studio for graphic support and to SOM for technical support.

Thanks to the generous support of the John S. and James L. Knight Foundation.

www.spur.org

INDEX

Introduction	3
Our Goals for This Project	5
SPUR’s Recommendations: An Overview	9
Ground Floor Use and Form	12
Active, right-sized ground floor spaces promote active sidewalks and pedestrian life.	
Site Access	23
Sites designed for people, rather than cars, make better places.	
Parking	31
Less parking means more room for residents and workers.	
Stormwater Management	34
Creative, comprehensive approaches to stormwater treatment allow for better site design.	
Fire	39
Thoughtful design and fire equipment selection allow for streets sized for people.	
Implementation and Next Steps	42
Appendix A	44
Summary Table of Recommendations	
Appendix B	47
SPUR’s Research Process	
Appendix C	See: spur.org/cracking-the-code-precedents
City Precedent Research	

INTRODUCTION

San Jose is in the midst of an ambitious transformation to a more urban future. For a variety of reasons including efficiency, sustainability, livability, economic competitiveness and public health, it is moving from a city built around the automobile to one focused on walkable, transit-supportive places. There are many facets to this transformation, and many challenges.

San Jose is the largest city in the Bay Area, with just over 1 million residents spread across 180 square miles. In 2011, through the adoption of its general plan, *Envision 2040*, the city of San Jose boldly decided to capitalize on its strengths and reduce its environmental impact by channeling future growth into a more urban, people-focused pattern. *Envision 2040 continues* to support the growth of downtown while focusing most of the expected 470,000 new jobs and 120,000 new housing units in “Urban Villages” along major transit corridors and at existing neighborhood commercial centers throughout San Jose. A key component of the *Envision 2040* vision is enabling people to get out of their cars and onto transit, bicycles and their feet.

As SPUR laid out in our 2013 report *Getting to Great Places*,¹ part of the effort to make those transportation choices more attractive includes building better places at the human scale, in order to make walking, cycling and transit use more appealing. This means making streets and public spaces attractive, safe and interesting so that people want to spend time in them instead of just passing through. It also means that new development must meet the challenge of connecting more effectively with streets and public spaces. This is more difficult than it might seem. Urban buildings must accommodate numerous imperatives, from utilities and loading docks to leasable retail spaces, from garage entrances to elevator cores. Meeting these needs while also supporting active, walkable streets takes focused effort on the part of developers and city officials from many departments.

San Jose has already made great strides in prioritizing denser, more people-focused buildings, especially downtown. The city is setting a higher bar for good urban design than ever before. But many projects must go through multiple levels of review and negotiation with city staff, the Architectural Review Committee and other outside advocacy groups in order to get to that improved design. Many other projects do not meet the size threshold for architectural review and go unreviewed, unless flagged by interested parties. There is no specific definition of the city’s urban design priorities. City agencies often have other priorities and may lack internal capacity to evaluate the urban design impacts of their decisions. While the city’s design guidelines lay out how to reach great design in downtown, they are aspirational, unenforceable guidelines and are therefore often ignored or deemed infeasible.

How might the city raise the bar? As recommended in *Getting to Great Places*, SPUR proposes that San Jose address the ground rules of design — in the municipal code, largely under the planning and zoning code — in order to have the greatest positive impact on new development.

This approach could help ease and streamline the design review process, increase certainty for developers and the public, and raise the baseline level of urban design quality for every development project. Rather

¹ SPUR, *Getting to Great Places*, accessed October 26, 2015, <http://www.spur.org/publications/spur-report/2013-11-18/getting-great-places>

than increase process or complicate negotiations, the hope is that these code changes would simplify and clarify the city's expectations for the design of new development in areas planned for urban activity.

We derived the recommendations in this paper from careful research into existing codes in a variety of comparable cities in the Bay Area and on the West Coast, emphasizing locations that are seeking to implement a walkable urban pattern. (See Appendix C.) The policies we studied reside in a variety of codes, plans, and development standards, but in each case are enforceable standards, not guidelines. Many cities have design guidelines as well, with more ambitious or aspirational targets. It should be noted that in no case would our recommended changes result in San Jose's requirements being especially stringent; they are typical of requirements in many cities. We hope these recommendations can become the basis for code revisions and/or the creation of an Urban Village Zoning District.



Photo by Benjamin Grant

OUR GOALS FOR THIS PROJECT

For this effort, SPUR chose to suggest changes to the municipal code rather than guidelines. Why? The City of San Jose already has design guidelines in place for downtown and has drafted guidelines for upcoming Urban Villages. Both adhere to good urban design principles. However, guidelines do not have the same legal standing as code, so they can be more easily ignored or overridden. Guidelines can also create confusion since they are often more aspirational in nature, clouding expectations of the minimum standards. We propose that making some strategic code changes will increase certainty and clarity in the design and approvals process and will set baseline standards. These can then be paired with more ambitious guidelines, instead of looking to guidelines to serve both purposes.

This project targets areas where the city of San Jose is pursuing walkable, urban neighborhoods. We propose to first apply these code changes in the Downtown Core (DC) Zoning District² and in Urban Villages. If they are successful there, perhaps these code changes could someday apply in other districts or plan areas where the city is pursuing a similar urban vision. For example, SPUR suggests that the North San Jose core area might be an appropriate area to consider for the future application of these or similar code changes. North San Jose has ambitious design guidelines, but they are not currently being applied rigorously. During this time of urban transition, basic requirements like those detailed here might be more palatable and effective until a more urban pattern of development is established.

This project only considers new construction. Older buildings contribute to the fabric and character of San Jose's downtown, and in many cases it could be prohibitively expensive to retrofit them.

Although good street design is essential to the creation of walkable places, SPUR did not review Department of Transportation (DOT) Street Standards as a part of this project. In partnership with Public Works and other departments, DOT is already in the process of re-envisioning those standards as Complete Streets Guidelines, based on the excellent, more urban standards of the National Association of City Transportation Officials (NACTO). SPUR looks forward to reviewing and weighing in on that document.

Lastly, this effort is not about the design and approvals process. In early 2015, San Jose's Planning Department undertook an examination of the Architectural Review Committee and the department's design review process. SPUR provided detailed comments and input during that outreach, pushing for a focus on urban design, the hiring of staff with urban design expertise and the casting of a wider net for projects, both downtown and citywide. We look forward to working with the city on this effort.

How Would These Codes Dovetail With Design Guidelines?

SPUR recommends a two-tier approach to standards and guidelines; we consider the following recommendations *minimum standards*, not ideal targets. Redwood City's Downtown Precise Plan and Fremont's Warm Springs Innovation District provide models of a two-tier set of standards and guidelines. Even better, they provide an incentive to follow the guidelines. In Redwood City, if a proposed project

² Unless otherwise specified, the word "downtown" in this document refers to the Downtown Core (DC) Zoning District.

meets every design guideline applicable to its project, the project can skip a public design review hearing and go through an administrative design review process, which is a faster and more certain path for developers. We suggest that San Jose might be able to implement a similar strategy in downtown (through an update of the 2004 Downtown Design Guidelines) and in the Urban Villages (through the Urban Village plans currently in progress, as well as those ahead).



Photo by Sergio Ruiz

Where in the Code Would These Recommendations Be Added?

The zoning code already has a specific section devoted to the Downtown Core. SPUR appreciates the city's existing policy of flexibility with respect to regulating land use in downtown, but we prefer a strong and clear approach when it comes to the physical form of buildings. Many of the recommendations in this paper could be addressed in the Downtown Core Zoning District section of the code.

For Urban Villages, we suggest that a special Urban Village Zoning District be created under the umbrella of the Pedestrian-Oriented Zoning Districts, similar to or incorporated into the Main Street Zoning District originally established for the Alum Rock neighborhood business district. Where applicable, we have included the existing Main Street Zoning District code reference for comparison. Many projects continue to pursue Planned Development (PD) zoning, a process of rezoning for specific projects. Similar project-specific zoning is likely for General Plan-enabled "Signature Projects." However, an Urban Village Zoning District based on these recommendations could provide a standardized basis or starting point for such zoning processes, ensuring that basic urban design standards are met unless specifically modified in the service of an overriding concern.

A Note on Prioritizing the Pedestrian: Primary and Secondary Frontages

For questions related to the ground floors of buildings and to site access, the most restrictive standard cannot apply in all locations. Dense urban locations like downtown San Jose have layers of constraints and requirements that “blank slate” sites in more suburban locations do not have to contend with. We suggest that each project define a “primary pedestrian frontage” where a higher standard might be applied based on the existing and planned neighborhood context, adjacent properties, the shape and orientation of the site, etc. All other frontages would be designated “secondary frontages” except on certain special sites identified upfront by the city. While in most Urban Villages, it is clear which street is the primary pedestrian frontage — The Alameda, East Santa Clara Street, West San Carlos Street — this determination is more complicated, but more important, in downtown. Market Street or Santa Clara? San Fernando or Fourth Street? Because of the complexity and site-specific nature of the decision, city staff will need to establish the frontage hierarchy for each project. A pedestrian street frontage framework for the whole of downtown could be decided up front through a city-led process, or it could be decided by city staff on a project-by-project basis. If there are sites where it is crucial to designate multiple primary frontages, city staff should identify those in advance in order to ensure integration of the higher standards into site design. Establishing a pedestrian-priority street framework upfront has many advantages, including certainty for developers and a holistic look at downtown. But it would require some effort by city staff to establish and update the framework, and it would need to be integrated with other policies like the Downtown Strategy and Downtown Streetscape Master Plan. We suggest that in each Urban Village planning process, the primary and secondary frontages could be established up front, but that it might be more practical for the city to establish pedestrian frontage priorities on a project-by-project basis with developer input.

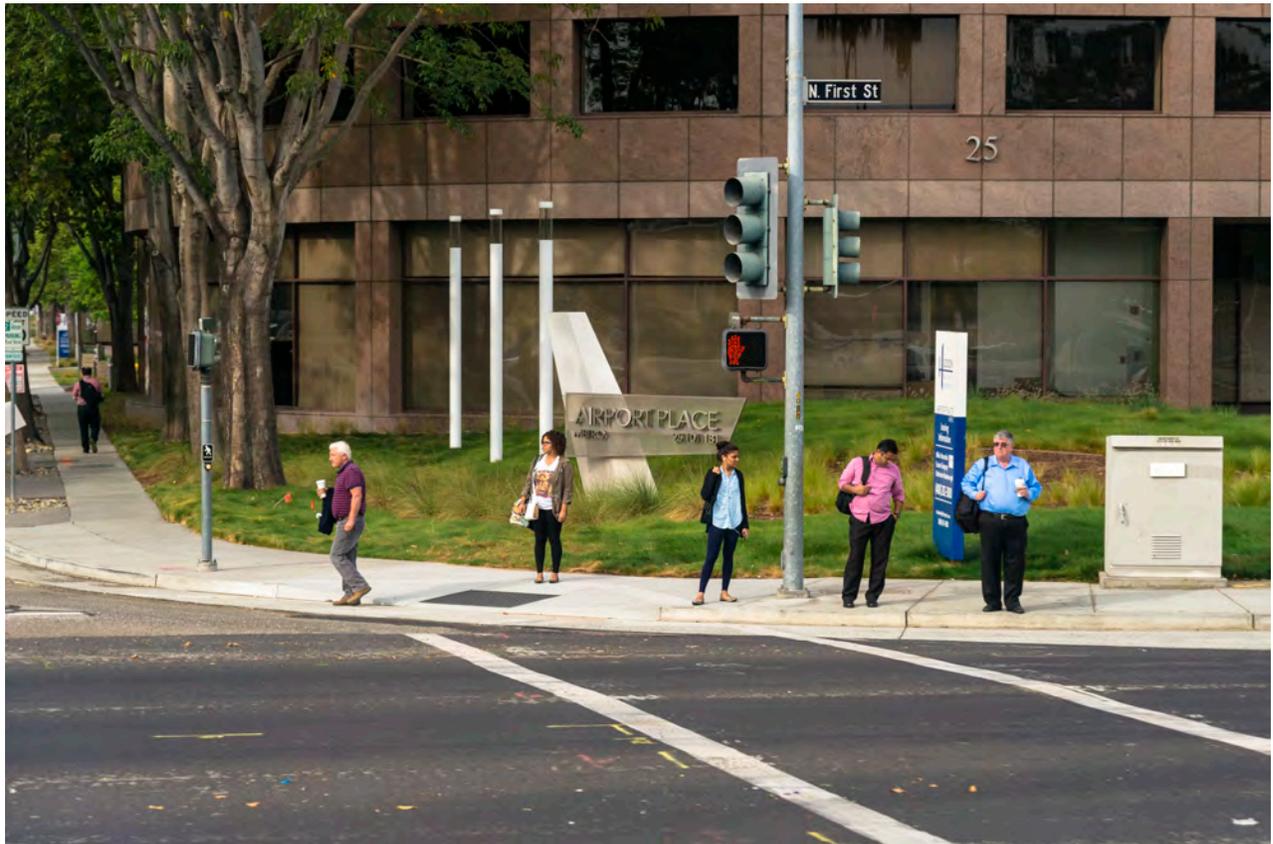
How Should Exceptions to These Requirements be Approved?

Development in a dense, urban setting is often more challenging than in suburban locations, with more constraints and factors to contend with. While SPUR intends to raise the baseline for urban design with clear requirements in key areas of San Jose, the last thing we want to do is stop or slow investment in downtown or fledgling Urban Villages. We have attempted to carefully walk this line as we recommend code changes, but inevitably there will be proposals with merit that fall just on the wrong side of the requirement or that are challenged in addressing overlapping site constraints. We suggest that exceptions for these code requirements would, like those in the Main Street Zoning District for Alum Rock, go to the decision maker (which could be the Director of Planning, Building and Code Enforcement, the Planning Commission or the City Council) for adjudication and would require a staff report from the city’s future urban designer making findings for the exceptions.³ Situations that might need such exceptions include:

- When a requirement must be violated in order to conform with a historic district height limit
- Unusual site shapes (i.e. non-rectangular sites), very small sites or limited frontages that necessitate exceptions
- A clear demonstration that meeting requirements presents an onerous financial impact
- Users or uses that offer an exceptional cultural or economic opportunity for the city of San Jose

³ As of the writing of this paper, there are plans in the works to bring on an urban designer to sit in the Planning Department, but no one has been hired yet. SPUR has supported this hire and envisions that he or she could play a key role in advising the planning director on when exceptions might be warranted.

In all cases, the city urban designer would need to find that a rigorously vetted alternative met the intent of the code to the degree feasible.



Many buildings in San Jose are designed to be seen from passing vehicles and do not connect to, or help activate, adjacent sidewalks. Photo by Sergio Ruiz.

SPUR'S RECOMMENDATIONS: AN OVERVIEW

SPUR's recommended code changes fall into five primary categories:

1. Ground floor use and form
2. Site access
3. Parking supply
4. Stormwater treatment
5. Fire access

Many of our recommendations come out of questions and issues raised in SPUR's *Getting to Great Places*⁴ and *The Future of Downtown San Jose*⁵ reports.

For each of the recommendations in this paper, we sought to answer the following questions:

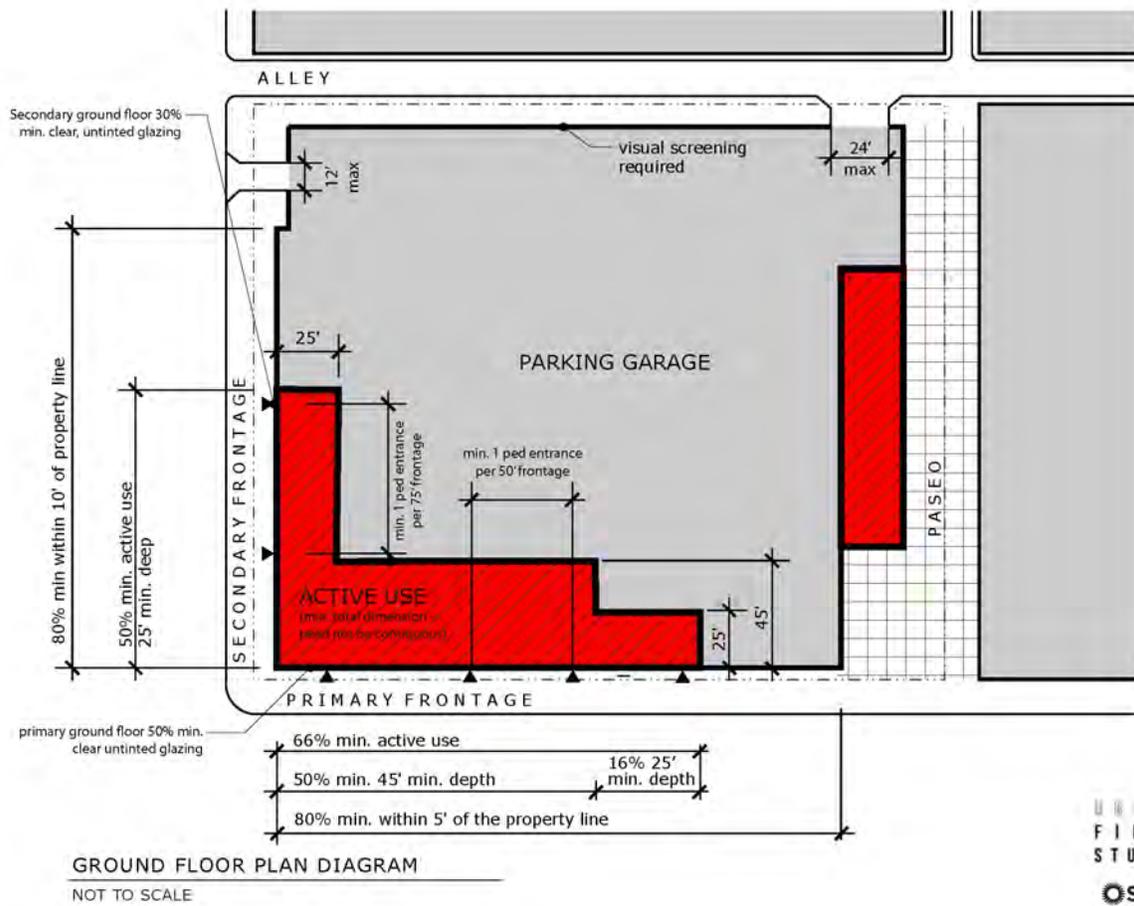
- What is SPUR's recommendation for the baseline code requirement?
- What is the basis for the recommendation? Why is this point important? What are good precedents?
- What do the existing San Jose code and design guidelines say about this issue?
- Where in the code or city policies would the change be implemented?

⁴ See supra note 1.

⁵ SPUR, *The Future of Downtown San Jose*, accessed October 26, 2015, <http://www.spur.org/publications/spur-report/2014-03-17/future-downtown-san-jose>

The following plan and section diagrams summarize SPUR's recommendations for codes regulating building form in downtown San Jose and other walkable urban growth areas. We present the recommendations in detail in the chapters that follow.

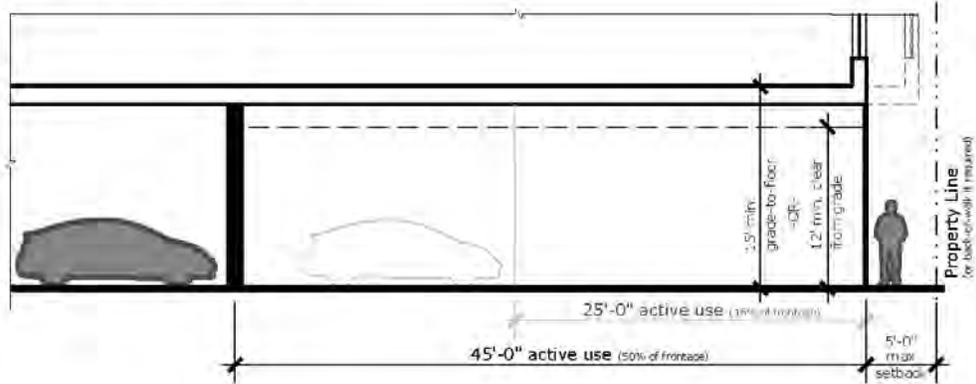
Ground Floor Area



Ground Floor Frontages

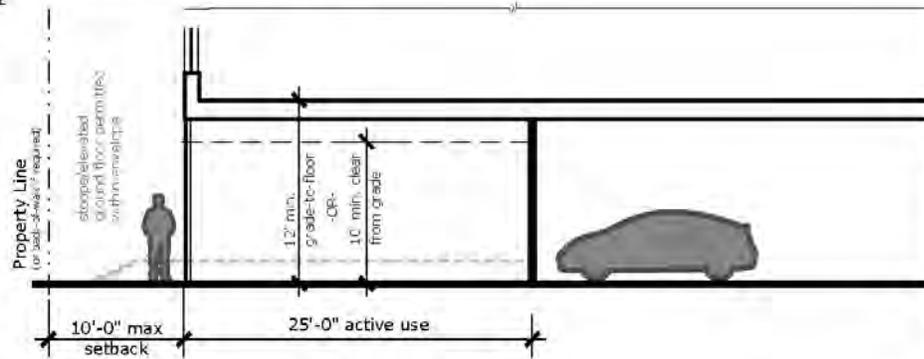
TYPICAL SECTION - PRIMARY FRONTAGE

NOT TO SCALE



TYPICAL SECTION - SECONDARY FRONTAGE

NOT TO SCALE



NOTE: All dimensions are proposed minimum standards. See applicable guidelines for preferred targets



1. GROUND FLOOR USE AND FORM

Active, right-sized ground floor spaces promote active sidewalks and pedestrian life.

The design and use of the ground floor is key to whether a building either enhances or degrades the pedestrian environment. Active, generous ground floors that work for people-centric uses (including but not limited to retail) support comfortable and engaging streets. Blank walls, parking garages, reflective glass and driveways leave pedestrians feeling unwelcome or even unsafe. Too much of that, and most people will avoid walking.

Ground-floor retail in a mixed-use building may be the first image that comes to mind, but it is far from the only solution to pedestrian-oriented ground floors. Open lobbies, community spaces, workshops, residential stoops, even office space, can all generate foot traffic, visual interest and “eyes on the street.” In San Jose’s relatively soft retail market, it can be difficult to lease street-oriented retail, and ground floors have often been written off as unworthy of care and attention, locking in a negative pattern. But if the city is serious about a walkable future, generous ground floor spaces can and should be provided, and they can accommodate a range of uses as pedestrian activity and retail interest build up over time.

The recommendations in this section are intended to support active, walkable streets by establishing minimum standards for the treatment of ground floor frontages. They intend to support these outcomes:

- Maximum active uses
- Generous height and depth of retail spaces
- Strong orientation to the street
- Minimum blank walls and dead spaces
- Frequent entrances and openings
- Responsiveness to market conditions

A Note on “Active Uses”

SPUR uses the term “active ground floor uses” to refer to any use of occupiable space that is adjacent to and can be accessed from the sidewalk. This may include but is *not limited to retail*. This is in keeping with the broader principle of regulating form to support good urban design but maintaining flexibility with respect to use. Many other cities, including Redwood City, San Francisco, Fremont’s Warm Springs and Portland, apply active use requirements in a similar way.

What is an active use? As mentioned above, SPUR defines an “active use” as occupiable space accessed by pedestrians from the sidewalk or paseo. Examples include retail, lobbies, residential or live-work units with direct sidewalk access, resident amenities (gym, laundry, lounges, etc.) that are accessible from the sidewalk, cultural uses, artist studios, fabrication, workshop, repair and in some cases office or co-working spaces. This is distinct from the Downtown Ground Floor (DG) overlay that layers on additional use restrictions for a specific subset of the Downtown Core and also distinct from “active commercial building frontage” as defined in the city’s Main Street zoning district – ground floor street-fronting space designed for retail or other customer-oriented commercial use.

What is an inactive use? Examples include blank walls, structured parking, surface parking, service entrances, garage entrances, fire exits, utilities and vents.

Recommendation 1.1

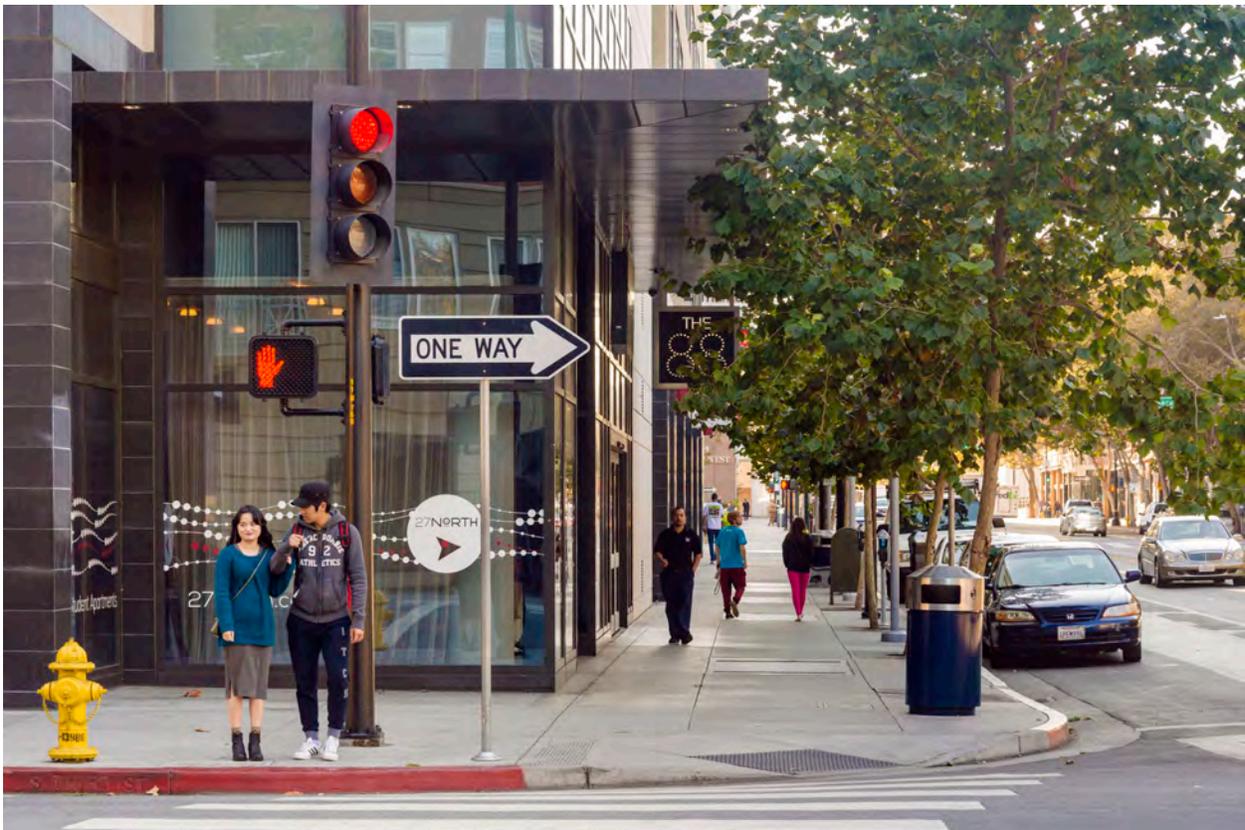
On primary frontages, a minimum of 66 percent of ground floor street frontage must be occupied by an active use.

On secondary frontages, a minimum of 50 percent of ground floor street frontage must be occupied by an active use.

Basis for Recommendation

While retail is an ideal ground floor use, there is not enough demand for it to be located everywhere — and vacant storefronts are little better than blank walls. Requiring an active use, but not a specific one, allows for flexibility while helping to facilitate human-scale activity at the street level. Most cities have active use or active commercial requirements on certain frontages. This recommendation is most closely in line with the standards in Redwood City and San Diego, and our active use definition is similar to those in San Francisco, Redwood City and Fremont’s Warm Springs Innovation District. Note that the recommendation here is a bare minimum, and project sponsors should strive to exceed it as much as possible. In an ideal building design, 100 percent of ground floor street frontage would be occupied by active uses, but we recognize that there are many competing demands on ground floor space.

The existing Downtown Ground Floor Overlay requirements would still hold unless amended.



Retail is not the only use that can activate the ground floor of a building; lobbies are another good example. Photo by Sergio Ruiz.

Existing Code and Guidelines

- The Downtown Ground Floor Overlay District Area requires a viable storefront space at the street [San Jose Zoning Code, Chapter 20.70.520(B)].
- The Main Street Zoning District requires 50 to 60 percent of a commercial building frontage to be active and designed for retail or other customer-oriented commercial use. For residential building frontages, it requires one pedestrian entrance for every 50 feet of residential use [San Jose Zoning Code, Chapter 20.75.130].
- The Downtown Design Guidelines say that buildings should be designed for residential and/or retail uses to be entered directly from the sidewalk. The guidelines encourage active uses at street level, including residential entrances; shops; restaurants and cafes; services for the public or for commercial offices such as fitness centers, cafeterias and daycare centers; community spaces; art exhibition space and display windows; commercial lobbies and front doors. In addition, at least 75 percent of street frontage on retail blocks should be designed for retail/restaurant use [San Jose Downtown Design Guidelines, p. 49, 50, 60].



Flexible ground-floor spaces can be used as businesses, workshops or residences. Photo courtesy David Baker Architects.

Where to Make This Change

For downtown, a ground floor active use requirement would go in the San Jose Zoning Code, Chapter 20.70, Part 3 (Development Regulations).

For Urban Villages, a ground floor active use requirement would be incorporated into our proposed Urban Village Zoning District section of the San Jose Zoning Code, Chapter 20.75, Part 2 (Development Regulations).

Recommendation 1.2

On primary frontages, ground floor spaces must have at least 12-foot clear or 15-foot floor-to-floor height.⁶

On secondary frontages, ground floor spaces must have at least 10-foot clear or 12-foot floor-to-floor height.

Ground floor residential units with stoops must have at least 12-foot grade-to-floor height.

Basis for Recommendation

Many ground floor uses, including retail and restaurants, demand spaces with high ceilings because they provide better light, a more pleasant atmosphere and greater design flexibility as well as to accommodate needed equipment. In downtown and in Urban Villages, building taller ground floors even where the market does not currently justify retail allows for that use in the future. Taller ground floors can also allow for mezzanines or lofts, increasing the flexibility of these spaces, though the minimum height suggested here does not quite allow for that intermediate level (roughly 15.5 feet clear is needed). Ground floor frontage height requirements are common in many city zoning codes, and this particular requirement is in line with most of the cities researched here, including San Francisco's Neighborhood Commercial districts, Fremont's Downtown and Warm Springs districts and Portland's Central City. Care should be taken to ensure that generous ground floors do not result in the loss of revenue-generating upper levels, but contemporary building codes have reduced the likelihood of this occurring.

⁶ "Clear" height is measured from the finished floor to the bottom of light fixtures/building systems. "Floor-to-floor" height is measured from finished floor to the finished floor of the level above. "Grade-to-floor" is measured from the grade at the ground floor sidewalk to the finished floor above.



Taller ground floors provide a more pleasant atmosphere and allow for greater flexibility in the future use of the space. Photo by Sergio Ruiz.

We provide two options for how to meet this requirement: a “clear” measurement (measured to the bottom of light fixtures and any building systems) and a “floor-to-floor” measurement. If the project sponsor is able to accommodate the structure and systems in a compact manner, a slightly shorter ground floor height could be allowed. Residential stoop conditions are also treated differently, since we do not intend to require that the internal floor-to-ceiling height meet a commercial standard.

This recommendation is a suggested baseline requirement for the code. As established in *The Future of Downtown San Jose*, SPUR prefers a minimum of 15 feet clear at all ground floors on all frontages.

On many buildings downtown, it will make sense for ground floor heights to be the same (12 feet clear at a minimum) on all frontages, but in Urban Villages, there may be sites where a single project is made up of multiple buildings, and frontages could be built to different standards.

Existing Code and Guidelines

- Ground floor height in the Downtown Ground Floor Overlay Area “should be adequate to accommodate retail uses consistent with the predominant character of retail uses in the immediate vicinity, or to promote a theme or identity of the larger area in which it is located” [San Jose Zoning Code, Chapter 20.70.520.B].
- Ground floor spaces in the Main Street Zoning District (applicable to the Alum Rock form-based code area) are required to be 15 feet clear if under 8,000 square feet in area and 18 feet clear if greater than 8,000 square feet [San Jose Zoning Code, Chapter 20.75.140, Table 20-153].

- The city’s Downtown Design Guidelines recommend 15 feet clear for ground floor retail [San Jose Downtown Design Guidelines, p. 61].

Where to Make This Change

For downtown, a ground-floor height requirement would go in Chapter 20.70, Part 3 (Development Regulations).

For Urban Villages, a ground-floor height requirement would be incorporated into our proposed Urban Village Zoning District section of the San Jose Zoning Code, Chapter 20.75, Part 2 (Development Regulations).

Recommendation 1.3

On primary frontages, ground floor spaces must be at least 45 feet deep for 50 percent of the frontage. The remainder of the *active* frontage (16 percent of the total street frontage, per Recommendation 1.1) must be at least 25 feet deep.

On secondary frontages, ground floor spaces must be at least 25 feet deep for 50 percent of the frontage.

In addition, the 45-foot deep ground floor street-facing space on primary frontages must be designed with capacity for HVAC, grease traps and other features of full-service restaurants.

Basis for Recommendation

Most retailers and restaurants prefer a deep space in order to accommodate back-of-house operational space (kitchen, storage, restroom) as well as space for customers. As mentioned above, while not all ground floor spaces in downtown or the Urban Villages may be ready for retail now, it is important to build in flexibility for the future. Most of the city precedents we researched included a minimum storefront depth, either in the 40-to-60-foot range (ideal depth for traditional retailers and food service in order to accommodate restrooms and back-of-house needs) or in the 20-to-25-foot range to accommodate “liner” retail uses.⁷ San Diego and Fremont are two cities that require a certain percentage of frontage at the greater depth and a certain percentage at the smaller depth in order to accommodate utilities, parking, elevator cores, fire exiting, and other services, users and site constraints.

For maximum flexibility over time, we suggest the city require that all of the deeper (45-foot) spaces on primary frontages have room to accommodate HVAC, grease traps and other features of full-service restaurants. The actual systems would only need to be furnished as part of appropriate tenant improvements.

Existing Code and Guidelines

- Ground floor depth in the Downtown Ground Floor Overlay Area “should be adequate to accommodate retail uses consistent with the predominant character of retail uses in the immediate vicinity, or to promote a theme or identity of the larger area in which it is located” [San Jose Zoning Code, Chapter 20.70.520.B].

⁷ “Liner” retail is relatively shallow retail that activates what would otherwise be a dead frontage.

- Ground floor spaces in the Main Street Zoning District (applicable to the Alum Rock form-based code area) are required to be 45 feet deep if under 8,000 square feet in area and 60 feet deep if greater than 8,000 square feet [San Jose Zoning Code, Chapter 20.75.140, Table 20-15].
- The city's Downtown Design Guidelines prefer ground floor retail spaces to be 60 feet deep [San Jose Downtown Design Guidelines, p. 60].

Where to Make This Change

For downtown, a ground floor depth requirement would go in the San Jose Zoning Code, Chapter 20.70, Part 3 (Development Regulations).

For Urban Villages, a ground floor depth requirement would be incorporated into our proposed Urban Village Zoning District section of the San Jose Zoning Code, Chapter 20.75, Part 2 (Development Regulations).

Recommendation 1.4

On primary frontages, 50 percent of the total ground floor elevation's surface area must be clear un-tinted glazing and allow for a visual connection, except where there are residential stoops. On secondary frontages, 30 percent of the total ground floor elevation's surface area must be clear un-tinted glazing, except at frontages where there are residential stoops.

Basis for Recommendation

The urban street environment is more inviting to pedestrians when they are able to see activity and goods inside a building. A street where there are no windows or where all the shades are pulled is boring, feels unsafe and discourages people from wanting to walk there. Most cities researched have minimum transparency requirements in their downtowns, ranging from 30 percent in residential situations to 60 percent in commercial locations, sometimes measuring the full height of the ground floor elevation and sometimes addressing a limited strip of the elevation. SPUR's recommendation of 50 percent of the total surface area of the ground floor allows for flexibility in implementation. A visual connection should be maintained when these spaces are occupied, which should be enforced through tenant improvements. Some cities, like San Diego, also limit blank walls fronting the street.



Transparent glass (top) provides visual interest and a sense of engagement and safety for pedestrians. Smoked or reflective glass (bottom) functions more like a blank wall. Top photo by Benjamin Grant. Bottom photo by Kristy Wang.

Existing Code and Guidelines

- The existing Downtown Core Zoning District does not include requirements for transparency at the ground floor.
- The Main Street Zoning District code requires “clear, untinted glass or other glazing material on at least 70 percent of the surface area of the façade between a height of 18 inches and 96 inches” [San Jose Zoning Code, Chapter 20.75.130, Table 20-153].
- The Downtown Design Guidelines seek to maximize visibility of street level uses, asking for 30 to 50 percent (mixed-use blocks) or 50 to 75 percent (retail blocks) transparent surface at the ground floor [San Jose Downtown Design Guidelines, p. 50].

Where to Make This Change

For downtown, a ground floor transparency requirement would go in the San Jose Zoning Code, Chapter 20.70, Part 3 (Development Regulations).

For Urban Villages, a ground floor transparency requirement would be incorporated into our proposed Urban Village Zoning District section of the San Jose Zoning Code, Chapter 20.75, Part 2 (Development Regulations).

Recommendation 1.5

On primary frontages, 80 percent of the building ground floor frontage must be within 5 feet of the property line or the building face line.

On secondary frontages, 80 percent of the building ground floor frontage must be within 10 feet of the property line or the building face line.

Basis for Recommendation

Part of the experience of walking on a traditional urban street includes having a sense of enclosure. A consistent “street wall” or building face line can help frame the street to make it a comfortable place. Setting a required build-to line or maximum setback at or close to the property line for most buildings on a given street helps create that urban experience. When there are thoughtful decisions to break the street wall for a plaza or courtyard, it becomes more special and deliberate. In some cases, a hardscape setback is required to widen sidewalks where the right-of-way is limited. In those cases, the maximum setback recommended here would be measured from the building face line rather than the property line.

We note some areas of the city that fall within historic districts (specifically the Downtown Commercial National Register District and the St. James Square City Landmark District) have guidelines for setbacks that would conflict with these code recommendations. The city should clarify its position on the standing of historic guidelines generally since current interpretations appear to vary project by project.



Setting buildings right next to the sidewalk provides a strong edge to pedestrian spaces, enhancing the sense of enclosure and creating a comfortable walking environment. Photo by Sergio Ruiz.

Existing Code and Guidelines

- The Downtown Core Zoning District includes required setbacks for specific block frontages in downtown but no general standard [San Jose Zoning Code, Chapter 20.70.220].
- The Main Street Zoning District creates build-to lines 5 feet from the front lot line at a major street, 2 feet from a front lot line at a minor street, and 15 feet from a front lot line at a residential street. The code requires 70 percent of the building frontage to be at or within 1 foot of the build-to line [San Jose Zoning Code, Chapter, 20.75.110, Table 20-151].
- The Downtown Design Guidelines encourage 80 percent of the building façade to be within 2 feet of the property line or the building face line. In addition, the Downtown Design Guidelines prefer residential setbacks be set at the minimum needed to accommodate stoops [San Jose Downtown Design Guidelines, p. 50, 55].

Where to Make This Change

For downtown, build-to lines would go in the setback section of the San Jose Zoning Code, Chapter 20.70.220 (Setback Requirements, DC Districts).

For Urban Villages, build-to lines should be incorporated into our proposed Urban Village Zoning District section, Chapter 20.75, Part 2 (Development Regulations).

Recommendation 1.6

Permit bay windows and minor occupiable building projections over the right-of-way. These may be up to 12 feet wide and up to 3 feet deep, and must be located at least 12 feet above grade.

Note that this recommendation applies citywide, not only downtown and in Urban Villages.

Basis for Recommendation

In most cities we researched, buildings are permitted to project into the public right-of-way in clearly defined ways. This promotes modulation of the building facade, architectural interest and a tighter enclosure of the street, all of which support a better pedestrian experience. A well-known example of this is the bay windows of many San Francisco homes. Although buildings may be articulated inward without projecting into the public right-of-way, this comes at the expense of buildable area, a strong incentive to limit the practice. This recommendation confers a small amount of value for property owners but introduces a meaningful incentive to create better buildings.

Existing Code

Existing code in San Jose and Department of Public Works (DPW) policy prohibits occupiable projections over the public right-of-way.

At the time of writing, we understand that DPW is reviewing this and may be in the process of changing the code/policy to allow certain projections.

Where to Make This Change

For downtown and Urban Villages, explicit language that permits projections over the right-of-way would go in the San Jose Municipal Code, Title 13 (Streets, Sidewalks and Public Places).

2. SITE ACCESS

Sites designed for people, rather than cars, make better places.

Buildings must be accessible to those arriving by any mode of transportation, including foot, bicycle, transit and automobile. Because of the large scale of cars and their associated infrastructure, as well as the rigid engineering standards that often prevail, auto access tends to dominate and overwhelm pedestrian access. This affects pedestrians arriving on foot or alighting from vehicles of all kinds, including cars. For this reason, a walkable environment requires countervailing standards to limit the impact of vehicular access and promote a comfortable pedestrian environment.⁸ A good pedestrian environment is also supported by a fine “grain” that responds to the human scale. Grain is the frequency with which elements of the built environment are subdivided. For example, fine grain city blocks are shorter, with more street crossings per mile. This applies to the pattern of streets, blocks and development parcels (not treated in this paper) but also to the frequency of building entrances, storefronts and pedestrian pathways within a particular building or project.

This section recommends minimum standards to support the following:

- Prominent, frequent, well-located pedestrian entrances
- Limited number of curb cuts and driveways
- Narrowest functional curb cuts and driveways
- Minimum cost and physical footprint of parking

Recommendation 2.1

On primary frontages, for every 50 feet of frontage there must be one pedestrian entry to the building.

On secondary frontages, for every 75 feet of frontage there must be one pedestrian entry to the building.

Basis for Recommendation

Primary frontages in downtown and Urban Villages are where pedestrian interest and comfort are paramount. Long, inaccessible stretches of building frontage are not appropriate in these locations. Frequent entrances reduce walking distances, promote a variety of internal uses, and create visual interest and choice for pedestrians.

Existing Code and Guidelines

- San Jose’s code does not address pedestrian entries.
- The Downtown Design Guidelines place an emphasis on the pedestrian entry and suggest that vehicular entries should be secondary [San Jose Downtown Design Guidelines, p. 62].

⁸ The National Association of City Transportation Officials (NACTO) has raised the level of the discussion around appropriate design standards for urban streets. NACTO’s Urban Street Design Guide lays out engineering guidance that offers an alternative to the more car-oriented standards of the American Association of State Highway and Transportation Officials (AASHTO).

Where to Make This Change

For downtown, a pedestrian entry frequency requirement would go in the San Jose Zoning Code, Chapter 20.70, Part 3 (Development Regulations).

For Urban Villages, a pedestrian entry frequency requirement would be incorporated into our proposed Urban Village Zoning District section of the San Jose Zoning Code, Chapter 20.75, Part 2 (Development Regulations).



Frequent entrances help create a welcoming environment for pedestrians. Photo by Benjamin Grant.

Recommendation 2.2

Curb cuts are prohibited on primary frontages unless the building has only one frontage or has multiple primary frontages.

Basis for Recommendation

In order for people to feel comfortable walking, the sidewalk needs to be a continuously safe, pleasant place for pedestrians. Frequent curb cuts for vehicle driveways disrupt the pedestrian path on the sidewalk, increasing the number of places for potential conflict between people and cars and decreasing the sense of safety and comfort. In many cities, certain significant streets prohibit curb cuts entirely (Market Street in San Francisco, Broadway and El Camino Real in Redwood City, Main Street and

Innovation Way in Fremont). Our recommendation recognizes that this will not be feasible in every location, but it establishes the principle that driveways do not belong on primary frontages in walkable districts.

Existing Code and Guidelines

- San Jose’s code does not address the frequency or location of driveways or curb cuts except for the Main Street Zoning District (Chapter 20.90.130.D and E). The Department of Transportation’s Geometric Design Guidelines (which are currently under revision) limit driveways to 2 per 300 feet of roadway, at least 80 feet apart and 150 feet from the corner, but this guideline is most likely related to driveway impacts on traffic congestion rather than pedestrian safety [DOT Geometric Design Guidelines, 3.6.4].
- The Downtown Design Guidelines recommend minimizing the number and size of curb cuts to reduce impact on pedestrians and promote sidewalk continuity [San Jose Downtown Design Guidelines, p. 38, 63-64].

Where to Make This Change

For downtown and Urban Villages, curb cut regulations would go in the San Jose Zoning Code, Chapter 20.90.130 (Driveways).

Recommendation 2.3

Driveway curb cuts and garage entries must be limited to 12 feet maximum width for a one-way entrance and 24 feet maximum for a two-way entrance.

When combined with commercial loading, curb cuts must be limited to 27 feet maximum width.

Basis for Recommendation

As mentioned above, the sidewalk zone should prioritize pedestrian safety and comfort. Minimizing vehicle curb cut and driveway dimensions is key to ensuring that the pedestrian path on the sidewalk is given primary access. Our suggested maximums are in line with zoning in many comparable downtowns, including Mountain View, Redwood City, Fremont (Warm Springs) and Portland.



Wide garage entrances (top) feel unsafe for passing pedestrians and can discourage walking. Instead, driveways and garage entries should be as narrow as possible and should minimize disruption to sidewalks (bottom). Top photo by Sergio Ruiz. Bottom photo by Benjamin Grant.

Existing Code and Guidelines

- The existing San Jose code addresses curb cuts as “driveways,” which require a minimum 10 foot width. No maximum width is specified [San Jose Zoning Code, Chapter 20.90.130].
- DPW’s Standard Details, Roadway Geometrics and DOT’s Geometric Design Guidelines specify a minimum curb cut width of 12 feet and maximum of 26 feet for residential buildings and a minimum curb cut width of 16 feet and a maximum of 32 feet for commercial buildings [DPW Standard Details, Roadway Geometrics, page 24 (R-6 revised); DOT Geometric Design Guidelines, Table 3-10].

Where to Make This Change

For downtown and Urban Villages, the maximum driveway width or curb cut should be consistently designated in the San Jose Zoning Code, Chapter 20.90.130, in DPW’s Standard Details and in DOT’s Geometric Design Guidelines (future Complete Streets Guidelines).

Recommendation 2.4

All off-street structured parking on ground floors must be set back a minimum of 25 feet from the building face along public streets, except for service alleys.

All off-street structured parking on upper levels or along service alleys must be completely visually screened from the street.

Basis for Recommendation

Parking is one of the most deadening and unwelcoming ground floor uses for pedestrians. All too often long segments of sidewalk are lined with parking garages, degrading the pedestrian experience. Off-street parking on the ground floor, where present, should be located at the interior of the building, lined with active uses and away from public streets. Where structured parking serves retail or use by the general public, care should be given that pedestrian access to and from parking is designed to activate streets, public spaces and ground floors. Exposed structured parking is unattractive and degrades the pedestrian experience. Where parking is permitted to occupy spaces visible from sidewalks (on upper levels and along service alleys), it should be screened from view in a manner that creates visual interest and is integrated with building’s overall architecture.

Existing Code and Guidelines

- The existing Downtown Core Zoning District does not have standards for the location of parking within a building [San Jose Zoning Code, Chapter 20.90.170].
- The Main Street Zoning District says parking structures “shall not be located within 50 feet of the main street unless they are submerged below grade or are integrated within buildings that conform to the active commercial building frontage requirements” of the district [San Jose Zoning Code, Chapter 20.90.120].
- The Downtown Design Guidelines suggest various measures to reduce the visual impact of parking and increase activation at the street level [Downtown Design Guidelines, p.62, 65].

Where to Make This Change

For downtown and Urban Villages, setback requirements for structured parking would go in the San Jose Zoning Code, Chapter 20.90.120 (Setbacks). Screening requirements for structured parking would go in the San Jose Zoning Code, Chapter 20.90.170 (Screening and Landscaping).



Exposed parking degrades the sidewalk environment and discourages walking. Photo by Benjamin Grant.

A Note on Alleys and Paseos

Alleys can serve a variety of functions. Some are largely utilitarian and make a good place for service and loading functions. But these and other small streets also have a role to play in the pedestrian circulation and open space network. Even service alleys should have continuous sidewalks, and utilitarian functions in adjacent buildings should be designed to minimize disruption of pedestrian safety and comfort. A few alleys are specifically intended as active pedestrian spaces — commonly referred to as *paseos* in San Jose. These often exclude vehicle traffic entirely and should be treated as active frontages.



Photo by Sergio Ruiz

Recommendation 2.5

New off-street surface parking is prohibited downtown.

In Urban Villages, off-street surface parking is prohibited on primary frontages, must be screened from view on secondary frontages and would require a conditional use permit for secondary frontages.

Basis for Recommendation

The designated growth areas where these code recommendations would apply are generally planned for densities that require structured parking. Where surface parking does exist, it often acts as a form of land banking until development conditions mature. Where this occurs, surface parking should be carefully screened by landscaping, low fences or public amenities. These should provide a clear pedestrian connection and a visually permeable edge to the adjacent sidewalk. Many cities limit or require screening of parking, but each city has a different approach. Redwood City probably has the closest requirements: Wrapped, or screened, parking is required at the 2nd-floor building edge, detailed standards and guidelines are laid out to guide the form of structured parking, surface parking is prohibited downtown but permitted outside of downtown. Per our report *The Future of Downtown San Jose*, we continue to recommend prohibiting surface parking downtown.

Existing Code and Guidelines

- Surface parking is not prohibited or limited in downtown San Jose. The code requires screening of parking lots with more than 6 spaces with solid masonry walls or wood fences between 4 and 6 feet high [San Jose Zoning Code, Chapter 20.90.170 Screening and Landscaping].
- Areas with active commercial frontage requirements in the Main Street Zoning District do not permit parking uses unless the property is an off-site parking facility with a conditional use permit [San Jose Zoning Code, Table 20-156].
- The Downtown Design Guidelines encourage precast walls to screen existing parking [Downtown Design Guidelines, p. 64].

Where to Make This Change

A prohibition on surface parking downtown and controls for surface parking in Urban Villages would go in the San Jose Zoning Code, Chapter 20.90.100 (Off-street Vehicle Parking Space Design Standards) and Chapter 20.90.170 (Screening and Landscaping).

3. PARKING

Less parking means more room for residents and workers.

San Jose has established ambitious targets for the reduction of drive-alone commuting, vehicle-miles traveled and greenhouse gas emissions. Parking policies have a major impact on these areas. Continuing to base parking requirements on historic patterns can limit changes in travel behavior, mask market signals that reveal the true cost of parking and compromise the pedestrian environment. Significant new transit services, including bus rapid transit, BART, California high-speed rail and the electrification of Caltrain, are likely to make downtown a major transit hub. But today, service remains below the levels needed to compete with driving for most trips. Carsharing, ridesharing and even driverless cars may significantly shift patterns of auto use in the future. In this context, parking policy should be used to avoid locking in a car-dependent pattern and allow the market to identify the most efficient use of existing parking resources.

Section 2 addressed the physical design of parking. The recommendations in Section 3 are focused on the impact of parking *supply* and are designed to encourage transit and bicycle use while reducing the cost and physical footprint of parking. They are intended to:

- Limit dead space, blank walls and featureless structures
- Reduce development costs
- Allow for market processes and price signals
- Avoid locking in current travel patterns
- Maximize the density potential of sites

Recommendation 3.1

Residential and commercial developments in downtown and Urban Villages associated with regional transit are not required to have a minimum number of parking spaces.

Basis for Recommendation

Reducing minimum parking requirements is a proven path toward reducing car usage, so in most cases the city should let the market decide how many parking spaces new development needs to provide.⁹ We understand that developers have marketing and financing requirements that usually pressure them to include some level of parking, but that doesn't mean the city itself needs to set a minimum.

⁹ By forcing the use of so much land for vehicle storage, parking requirements indirectly shield drivers from the cost of parking while providing them with a high level of convenience. This encourages driving over other travel modes. See Wilson, Richard W., *Parking Reform Made Easy*, Island Press. 2013. Pages 23-33 excerpted at <http://kronbergwall.com/read-richard-willson-case-against-minimum-parking-requirements/> The research shows a clear relationship between guaranteed parking at home and the greater propensity to use the automobile for work trips, even between origin and destinations that are well served by transit. See Weinberger, Rachel, *Death by a Thousand Curb Cuts*, Elsevier. 2001. <http://www.nelsonnygaard.com/wp-content/uploads/2014/09/Death-by-a-Thousand-Curb-Cuts.pdf>

Existing Code and Guidelines

- The San Jose Zoning Code typically requires a 1:1 parking ratio for residential multifamily development in downtown. The requirements for commercial units vary according to the specific use, but typical downtown office uses require 2.5 per 1,000 square feet. Downtown retail has no parking requirement [San Jose Zoning Code, Chapter 20.70.140, Table 20-140].
- The Main Street Zoning District requires a 1.25:1 minimum parking ratio for residential multifamily development in the Alum Rock district. This is less than the citywide requirement) [San Jose Zoning Code, Chapter 20.90.060, Table 20-211].

Where to Make This Change

For downtown, parking minimums would be removed from the San Jose Zoning Code, Chapter 20.70.140, Table 20-140.

For Urban Villages, parking minimum requirements would be incorporated into an Urban Village-specific table, like Table 20-211 in Chapter 20.90.060 of the San Jose Zoning Code.

Recommendation 3.2

Residential developments downtown may not provide more than 1.8 spaces per unit on average.

Basis for Recommendation

Parking maximum policies are used to further communities' goals of reducing car ownership and reducing the amount of valuable space devoted to car storage. Parking maximums have been implemented in areas of San Francisco, Redwood City, Fremont, San Diego and Portland. Based on our outreach to local stakeholders, the recommended maximum of 1.8 spaces per unit is suggested as a starting point to introduce the concept of a parking maximum, with the idea that it could be reduced over time. The city may also want to explore refining this recommendation to address requirements for different unit types. Although there is a transportation planning rationale for a commercial parking maximum, the softer commercial market and the city's 'jobs-first' land use policies make it unlikely to be implemented.

Existing Code

- The San Jose Zoning Code does not address parking maximums in downtown.
- The Main Street Zoning District requires a 2:1 maximum parking ratio for residential multifamily development in the Alum Rock district [San Jose Zoning Code, Chapter 20.90.060, Table 20-211].

Where to Make This Change

For downtown, a parking maximum would go in the San Jose Zoning Code, Chapter 20.70.140, Table 20-140.

For Urban Villages, a parking maximum would be incorporated into our proposed Urban Village Zoning District section of the San Jose Zoning Code, either Chapter 20.75 or Chapter 20.90.060.

Recommendation 3.3

Citywide, developers may pay an in-lieu fee instead of providing parking onsite.

Transportation management districts must be formed in Urban Villages and Signature Projects.

Basis for Recommendation

A parking in-lieu fee provides an option to better manage parking supply and consolidate parking in discrete garages rather than sprinkling it throughout every new building. If there is a future ahead in which parking for individual cars is not needed, or demand is reduced considerably, San Jose may have millions of square feet of garage space in hundreds of buildings that are difficult to repurpose. A centralized garage can relieve other buildings of parking, improving urban design, allowing spaces to become a tradable commodity responsive to market conditions, and allowing for structures to be repurposed or redeveloped. Parking in-lieu fees are already allowable downtown but not addressed citywide.

The practice of “unbundling” parking — separating the lease or purchase of parking from the cost of housing — is one concept our task force explored, but we did not include it as a recommendation at this time. Unbundling allows the resident to see the true cost of owning a car and makes housing more affordable for those who may elect not to rent or purchase the parking space. Breaking out the cost will help reveal the actual market demand for parking.

Transportation management districts are another way to coordinate strategies related to parking supply and parking pricing. They also encourage biking, walking and riding transit in the service of reducing car trips. Tools transportation management associations or districts use include providing commuter financial incentives, setting up carpooling/vanpooling/carsharing, coordinating improved transportation access and providing shuttle service.

Existing Code

- The zoning code in downtown references a “Downtown Parking Management Zone Off-Street Parking In-Lieu Fee Fund” and a schedule of fees [San Jose Zoning Code, Chapter 20.70.380 and Chapter 20.70.385]. No other areas appear to have an in-lieu option.
- A Downtown Parking Management Zone has been created [San Jose Zoning Code, Chapter 20.70.300].
- An Alum Rock Village Parking Management Zone has been created [San Jose Zoning Code, Chapter 20.90.800].
- The San Jose Zoning Code addresses optional transportation demand management measures that a project may select in order to reduce its required parking [San Jose Zoning Code, Chapter 20.90.220(A)].

Where to Make This Change

For downtown, any adjustments to the Downtown Parking Management Zone would go in the San Jose Zoning Code, Chapter 20.70.300 and in the Downtown Strategy 2000’s Downtown Parking Management Plan.

For Urban Villages, the creation of transportation management districts should be incorporated into our proposed Urban Village Zoning District in the San Jose Zoning Code, either Chapter 20.75 or Chapter 20.90, after Part 8 (Alum Rock Village Parking Management Zone).

4. STORMWATER MANAGEMENT

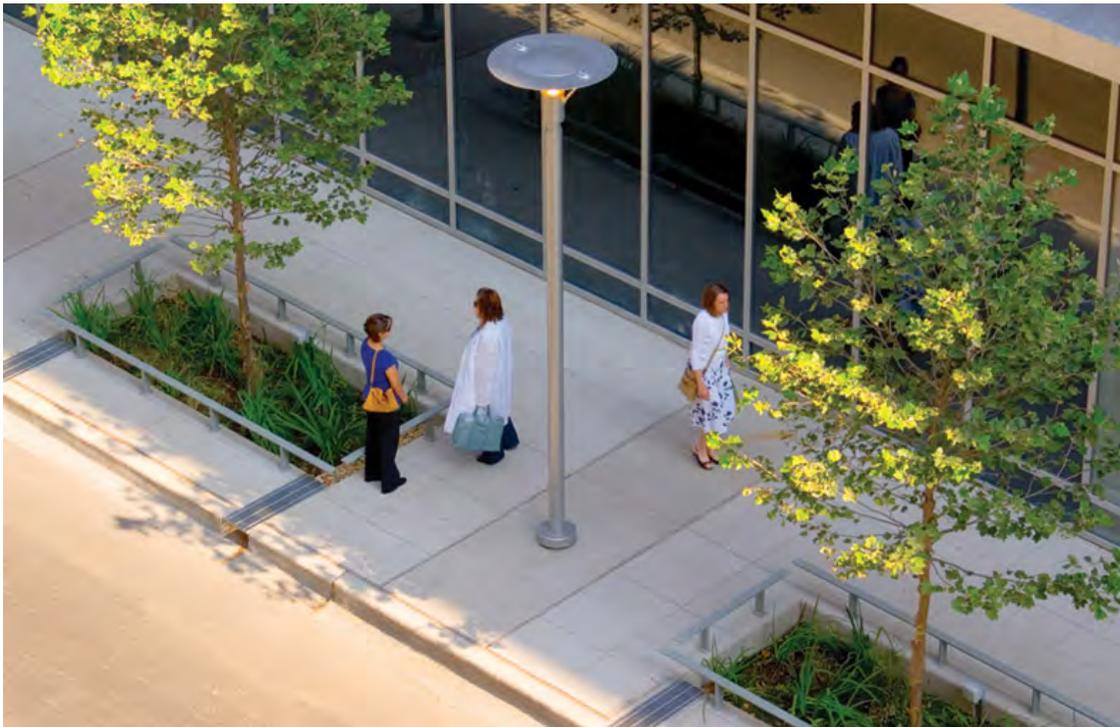
Creative, comprehensive approaches to stormwater treatment allow for better site design.

The management of stormwater has become a site design imperative, a regulatory requirement, and an opportunity for excellence in sustainable landscape and urban design. SPUR strongly supports a robust stormwater management regime in urban development. However, stormwater management is one of numerous overlapping factors whose interaction can create significant constraints and impede excellence in urban design. In the hands of an excellent designer, Low Impact Design (LID) features like swales and rain gardens can be artfully integrated into landscape and public space design. But just as often LID is an afterthought, placed wherever it can be accommodated.

Stormwater management can be handled very effectively at the district scale — a good fit for San Jose’s Urban Villages, which will also be subject to coordinated land use planning, environmental review, financing strategies (such as assessment districts) and parking management (see recommendation 3.4). The developer would pay an in-lieu fee to plug into an integrated stormwater management system, which is provided for in the existing Regional Water Quality Control Board permit. This would achieve efficiencies of scale, allow higher densities and better site design, and allow for designs that integrate placemaking and public space.

The recommendations in this section are intended to meet stormwater management requirements while promoting high-quality site design and enhancing the public realm. They seek the following outcomes:

- Limit overlapping site design constraints
- Maximize achievable densities
- Make stormwater management a design asset
- Pursue an integrated district-level approach
- Enhance the public realm by leveraging infrastructure investment



Some stormwater landscapes can serve to separate the sidewalk from adjoining retail (top). Well-designed streetscapes can manage stormwater while enhancing the built environment (bottom). Top photo by Sergio Ruiz. Bottom photo courtesy Hitchcock Design Group.



A Portland stoop frontage integrates usable space with stormwater gardens. Photo by Kelley Kahn

Recommendation 4.1

Offsite treatment of stormwater may be permitted if in-lieu fees are contributed to a city revolving fund.

Comprehensive stormwater treatment plans are required in Urban Village and Signature Project plans.

Note that this recommendation applies citywide, not only downtown and in Urban Villages.

Basis for Recommendation

This recommendation consolidates stormwater treatment in a city-developed facility, removing a major site design constraint that often gets in the way of thoughtful urban design. This also facilitates more coordinated and integrated efforts within the city to deal with regional stormwater management requirements. The regional stormwater permit includes provisions for such regional facilities, but San Jose to date has none. The first facility would need to be city-funded, but in-lieu fees to make use of the facility would replenish the fund, which could be used to build additional facilities. This process should be integrated into the Urban Village financing strategies. This process could also be managed by a city-chartered nonprofit corporation.

Offsite stormwater management facilities should be integrated into the city's open space, habitat and urban design goals and function as publicly accessible open space to the degree feasible.

Existing Code

- New development is required to participate in the city’s efforts to reduce stormwater pollution. The zoning code requires new development to comply with City Council Policy 6-29: Post-Construction Urban Runoff Management, which requires compliance with the Regional Water Quality Control Board’s National Pollutant Discharge Elimination (NPDES) Municipal Regional Permit (MRP) [San Jose Zoning Code, Chapter 20.95.210; NDPES MRP Tentative Order, C.3 New Development and Redevelopment].
- The zoning code allows for off-site stormwater runoff treatment with a special use permit, though our understanding is that this has not been used to date [San Jose Zoning Code, Chapter 20.95 Part 3 Off-Site Storm Water Treatment].

Where to Make This Change

Language regarding the formation of a city revolving fund could go in the San Jose Zoning Code under Chapter 20.95 Part 3 (Off-Site Storm Water Treatment). The requirement for comprehensive stormwater treatment associated with Urban Village and Signature Project plans could also go in that section.



San Francisco’s Mission Bay neighborhood incorporates district-wide stormwater treatment into parks and open space. Photo by Benjamin Grant

Recommendation 4.2

Required stormwater treatment is permitted to occur in the public streetscape and parks, provided there are adequate maintenance agreements and existing or required new usable park area is not reduced.

Note that this recommendation applies citywide, not only downtown and in Urban Villages.

Basis for Recommendation

This recommendation allows for creative and better-coordinated use of land when landscaped area can serve dual purposes: stormwater treatment and streetscape landscaping, or stormwater treatment and park/open space plantings. In urban settings, it is crucial that space be used thoughtfully and efficiently for multiple functions, in contrast with more suburban development patterns, where abundant space allows single-use solutions.

This policy should not allow for double counting of either fees or land contributions for parks. Rather, it should be structured to contribute resources to more extensive or more intensively managed open spaces. There is also a need to ensure that developers remain financially responsible for the long-term maintenance of stormwater treatment facilities, so maintenance agreements between the developer and the city would be required.

Existing Code

- The zoning code allows off-site stormwater treatment with a special use permit and if the applicant agrees to retain responsibility for operating and maintaining the off-site facilities [San Jose Zoning Code, Chapter 20.95.230].
- The public works code describes a credit against parks fees that can be awarded if the developer dedicates parkland/open space that can also be used for stormwater detention purposes [San Jose Public Works Code, Chapter 14.25.430].

Where to Make This Change

This recommendation may already be allowable under the San Jose Zoning Code, Chapter 20.95, Part 3 (Off-Site Storm Water Treatment) and just need to be established policy for Parks, Recreation and Neighborhood Services and DPW.

5. FIRE

Thoughtful design and fire equipment selection allow for streets sized for people.

The ability to provide safe and rapid emergency response to all structures is clearly essential; it is the purpose of local and state fire codes. However, there is considerable nuance and specificity in how these codes are interpreted and implemented city by city. San Jose's fire code interpretation has tended toward the more stringent relative to other jurisdictions. These interpretations have been developed to service a largely suburban community, resulting in some tension with the city's policies of denser, more walkable communities. For example, the wide streets that are desirable for maneuvering fire apparatus in an emergency are less conducive to pedestrian comfort and safety under the normal conditions that overwhelmingly prevail. A high degree of emergency access can also be space-intensive within a site, interacting with other site constraints like stormwater management (see section 4 above) to limit achievable densities, amenity space, landscaping and pedestrian access features.

San Jose should coordinate across departments to plan fire protection design for the city it is working to become, rather than the city it has been in the past. Across the country, dense, walkable cities with intimate, fine-grained streets have developed compatible fire standards and practices. Within the South Bay, other fire departments have more flexible standards, and alignment across jurisdictions can be critical during major incidents when mutual-aid agreements are deployed.

The recommendations in this section are intended to shift fire codes, standards and practices toward greater compatibility with the dense, walkable city that San Jose's policies seek to achieve. They are intended to:

- Adapt suburban practices to new development patterns
- Narrow streets and fire lanes
- Avoid redundant access and use more alternative means of access
- Limit overlapping site design constraints
- Align regional practices

Recommendation 5.1

Require emergency vehicle access lanes to be no more than the minimum width (20 feet clear) allowed by the state.

Allow fire apparatus access roads to accommodate a minimum inside turning radius of 25 feet and an outside turning radius of 45 feet or as otherwise determined by the fire code official.

If needed, the city should modify the fleet to be able to service the kind of city that San Jose is trying to become.

Note that this recommendation applies citywide, not only downtown and in Urban Villages.

Basis for Recommendation

Standard practice in the past has led to roads and cities being designed to meet the needs of fire vehicles. This has led to wider, more suburban roads that are more dangerous and less welcoming for pedestrians

on a daily basis. SPUR believes it makes more sense to purchase vehicles that fit the city rather than the other way around. The city's fire code official does have the ability to permit narrower roads than the state's requirement.

The turning radii recommendations here match those required in Redwood City.

Existing Code

- The city's adopted fire code is largely the 2013 California Fire Code, which requires a minimum unobstructed width of 20 feet for fire apparatus access roads. The fire code official is permitted to increase this as needed [2013 California Fire Code, Section 503.2.1 and 503.2.2].
- The city's adopted fire code is largely the 2013 California Fire Code, but there are some amended portions. The city has adopted a minimum inside turning radius of 30 feet and a minimum outside turning radius of 50 feet [San Jose Fire Code, Chapter 17.12.430; 2013 California Fire Code, Section 503.2.4]

Where to Make This Change

Changes to the minimum width or minimum turn radii would go in the San Jose Fire Code, under Chapter 17.12, Part 4 (General Precautions Against Fire, Emergency Planning and Fire Service Features). In the absence of changes to the code, SPUR recommends the city explore alternative purchasing decisions and the geographic deployment of fire apparatus relative to the city's areas of denser urban growth to choose appropriate vehicles for an urban context.

Recommendation 5.2

Allow the use of standpipes/wharf hydrants as a standard alternative to emergency vehicle access lanes.

Note that this recommendation applies citywide, not only downtown and in Urban Villages.

Basis for Recommendation

The fire department routinely approves the use of standpipes/wharf hydrants in place of providing emergency vehicle access roads through a variance. Given that these variances are granted for frequently occurring building types and site conditions, SPUR believes this process should be streamlined to allow this as of right in the city's fire code.

Existing Code

- The city's adopted fire code is largely the 2013 California Fire Code, which requires fire apparatus access roads within 150 feet of all portions of the exterior of the first floor wall. The fire code official is permitted to increase this when the building includes an approved automatic fire sprinkler system or because of location, topography, waterways, etc. and when an approved alternative means of fire protection is provided [2013 California Fire Code, Section 503.1].

Where to Make This Change

This recommendation would go in the San Jose Fire Code, under Chapter 17.12, Part 4.

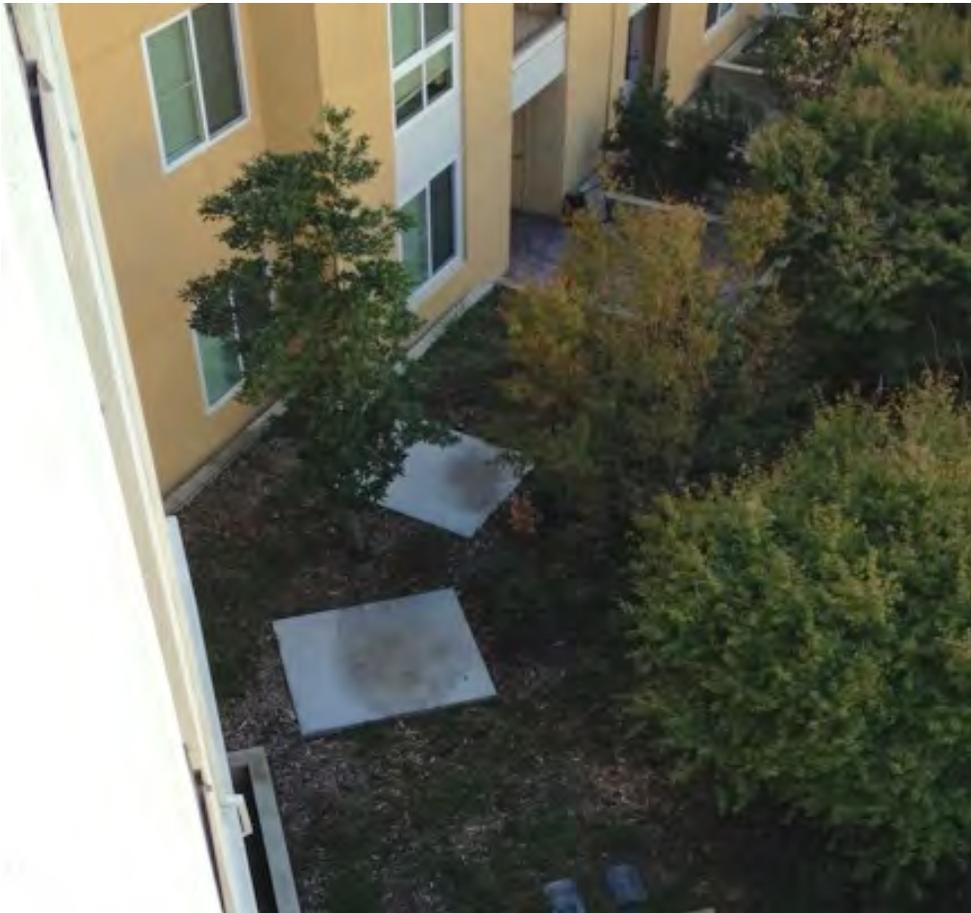
Recommendation 5.3

Eliminate fire ladder pad requirements to match fire department field practices and to line up with national code.

Note that this recommendation applies citywide, not only downtown and in Urban Villages.

Basis for Recommendation

San Jose is one of the only cities to require the installation of concrete ladder pads underneath the state-mandated escape and rescue windows in all sleeping rooms. Although city guidance says they may be made of “grass, gravel or other permeable materials,” elsewhere (and most commonly in practice) standards stipulate a “hard-surfaced pad” (concrete per city standard). Anecdotally, these pads are not deployed in field practice and are not required in other Bay Area communities. From a site planning point of view, these pads reduce space available for stormwater management features, landscaping, stoops and porches, degrading the built environment. This requirement should be modified or eliminated to align fire code interpretation with field practices and regional norms. In addition, the rescue window requirement, which was recently eliminated from the International Building Code, was restored to California’s code and has not yet been removed. San Jose should engage the state code revision process to remove this requirement and thus the ladder pad issue so it does not have to be out of compliance with state code.



Ladder pads outside an apartment building. Photo courtesy the Sobrato Group.

Existing Code

- California Residential Code, sections R310.11 & R612.2, CA Fire Code Section 1026, Emergency Escape and Rescue
- San Jose Fire Department Office of the Fire Marshall policy document Exterior Emergency Escape and Rescue

Where to Make This Change

The ladder pad requirement is addressed in the San Jose Fire Department Office of the Fire Marshall policy document *Exterior Emergency Escape and Rescue Opening Access*. This policy guidance could and should be withdrawn. In addition, the rescue window requirement should be eliminated from the California Fire Code, Section 1026.

IMPLEMENTATION AND NEXT STEPS

Through *Envision 2040* and other ambitious city policies, San Jose is on a path toward a more urban future in line with its innovative economy, the changing lifestyle choices of both younger and older generations and the environmental imperative to reduce carbon emissions from transportation and the built environment. As SPUR laid out in our report *Getting to Great Places*, urban design is an important tool that the City of San Jose must use to get people out of cars and onto transit, bicycles and their feet. Through the recommendations in this paper, SPUR hopes to help facilitate this shift in San Jose. Many city representatives participated in this research effort, and we plan to continue working with city staff and elected officials to figure out priorities and next steps for implementation.

This set of recommendations is by no means exhaustive. Some ideas initially pursued were tabled during our process due to market conditions, current practices and political realities, and there are certainly other good ideas out there that did not come up within the scope of this research project. Within some of the topics addressed here — particularly stormwater and fire — we also identified some questions for further research and/or convening. SPUR will flesh out the recommendations here and will continue to identify areas where the code could be updated to represent common best practices that are appropriate to San Jose.



Photo courtesy Federal Realty

Appendix A

SUMMARY TABLE OF RECOMMENDATIONS

GROUND FLOOR USE AND FORM	Existing Code	Recommendation
Active Use	Not addressed	<p>Occupiable space accessed by pedestrians from sidewalks and paseos</p> <p>Examples include retail, lobbies, residential units with direct sidewalk access (including stoops), resident amenities (gym, laundry, etc.) accessible from sidewalk, cultural uses, office in some cases</p>
Inactive Use	Not addressed	<p>Examples include blank walls, secondary entrances, service entrances, garage entrances, fire exits, utilities and vents</p>
Width	Not addressed except in Main Street Zoning (active <i>commercial</i>)	<p>Primary Frontages: Active use for minimum 66% of frontage</p> <p>Secondary Frontages: Active use for minimum 50% of frontage</p>
Height	Not addressed except in Main Street Zoning	<p>Primary Frontages: 12' min. clear or 15' floor-to-floor (except residential stoops, 15' grade-to-floor)</p> <p>Secondary Frontages: 10' min. clear or 12' floor-to-floor (except residential stoops, 12' grade-to-floor)</p>
Depth	Not addressed except in Main Street Zoning	<p>Primary Frontages: 45' min. depth for 50% of frontage, active remainder 25' min depth</p> <p>Secondary Frontages: 25' min depth for 50% of frontage</p>
Transparency	Not addressed except in Main Street Zoning	<p>Primary Frontages: 50% of total ground floor elevation's surface area must be clear, untinted glazing</p> <p>Secondary Frontages: 30% of total ground floor elevation's surface area must be clear, untinted glazing, except residential stoops</p>

Build-to Lines	Setbacks on particular frontages in Downtown Core (DC)	Primary Frontages: 80% of building ground floor frontage must be within 5 feet of the property line or the required building face line Secondary Frontage: 80% of building must be within 10 feet of property line or the building face line.
Projections Over the Right-of-Way	Not permitted	Permit bay windows and minor occupiable building projections (up to 12 feet wide, up to 3 feet deep) over the right-of-way are permitted. Must be located at least 12 feet above grade.
SITE ACCESS	Existing Code	Recommendation
Placement of Pedestrian Entrances	Not addressed	For every 50' of primary frontage there must be 1 pedestrian entrance (max. 75' spacing) For every 75' of secondary frontage there must be 1 pedestrian entrance (max 100' spacing)
Number of Curb Cuts	Citywide: 2 per 300' of roadway; min 80' apart; 150' from corner	Prohibit curb cuts on primary frontages unless only one frontage
Driveway and Garage Entry Width	Residential 12'-26' Commercial 16'-32'	12' max on one-way 24' max on two-way
Structured Parking	Not in Downtown Ground Floor (DG) overlay; OK citywide; No screening requirement	All off-street, structured parking must be lined at the ground floor street frontage (except for service alleys) with a minimum of 25' of active use space, except for permitted inactive frontages. All upper-floor structured parking must be visually screened.
Surface Parking	Not in DG overlay OK citywide	Prohibit surface parking downtown. Prohibit surface parking on primary frontages in Urban Villages, allow screened surface parking with conditional use permit on secondary frontages

PARKING	Existing Code	Recommendation
Minimums	2.5:1000 sf office 1:1 residential 0 retail	Remove parking minimums downtown and in Regional Transit Urban Villages
Maximums	None in place	Residential: maximum of 1.8 parking spaces per unit downtown Commercial: no maximum proposed
Off-Site or In-Lieu	Allowed; Prefers on-site or walking distance	Expand in-lieu fee option citywide and require parking management districts to be established in Urban Villages and Signature Projects
STORMWATER	Existing Code	Recommendation
In-Lieu Fees	Not addressed	Facilitate treatment offsite through revolving fund Require plan for comprehensive treatment into Urban Village and Signature Project plans
Streetscape and Parks	Not addressed	Allow with maintenance agreements, without reducing usable recreation area
FIRE	Existing Code	Recommendation
Multifamily Emergency Vehicle Access (EVA) Dimensions	Road to extend within 150' of all exterior walls;	Reduce EVA requirement to require narrower EVA access and smaller turn radii.
EVA Lane Width	20' minimum	Require EVA to be no more than minimum width (20' clear) allowed by state.
EVA Turn Radius	30' inside 50' outside	25' inside 45' outside
Multifamily Emergency Vehicle Access (EVA), Alternative Means of Fire Protection	Road to extend within 150' of all exterior walls;	Allow standpipe/wharf hydrants as a standard alternative to EVA roads.
Fire Ladder Pad Requirement	Required outside rescue windows	Remove requirement for fire ladder pads. Engage in state code process to remove rescue window requirement per the current International Building Code.

Appendix B

SPUR'S RESEARCH PROCESS

SPUR convened a task force to help conceive, research and review these recommendations. The task force included architects and urban designers, developers, city staff and other city stakeholders and experts. The task force met as a group to review these recommendations in an iterative process. Additionally, we interviewed many of the individual members extensively as expert resources. This group served as a sounding board to review the appropriateness and feasibility of SPUR's recommendations.

For our research process, we looked at the codes and plans of seven relevant West Coast cities as well as the standards set in specific parts of San Jose. We focused on the standards for downtowns or areas set to grow in an urban fashion. For non-citywide questions, we reviewed:

- San Jose – existing Downtown Core Zoning District code and municipal code
- San Jose – Downtown Design Guidelines
- San Jose – Main Street Zoning District code (Alum Rock form-based code)
- San Francisco – assorted district zoning codes and municipal code
- Redwood City – Downtown Precise Plan and municipal code
- Mountain View – Downtown Precise Plan and municipal code
- Palo Alto – Downtown Plan and municipal code
- Fremont – Downtown Plan and municipal code
- Fremont – Warm Springs Innovation District Plan and municipal code
- San Diego – City Centre Plan and municipal code
- Portland – Central City Plan District and municipal code

We reviewed the written code and downtown plans and interviewed current and former city staff in various cities. The research results can be reviewed in a comparison chart available at spur.org/cracking-the-code-precedents. SPUR formulated its recommendations for San Jose by looking at a “best practice average” and layering in the specifics of the San Jose development context and culture. The aim was to identify a baseline standard that is broadly feasible. Note that stormwater and fire are two areas regulated by the state, so while municipal code sometimes addresses or fine-tunes these issues, state or regional bodies set many of those rules.

City staff members have been key resources during the research process. We brought the proposed recommendations to a number of city departments and the Community and Economic Development CSA team for vetting. City departments we met with include:

- Planning, Building and Code Enforcement
- Transportation
- Public Works
- Parks, Recreation and Neighborhood Services
- Fire

APPENDIX C

CITY PRECEDENT RESEARCH

To formulate our recommendations for changes to San Jose’s codes, SPUR researched the codes and downtown plans of seven West Coast cities, listed in Appendix A. The results of our research — a detailed comparison of codes in the seven precedent cities, plus San Jose — are available online at:

spur.org/cracking-the-code-precedents