chapter 1

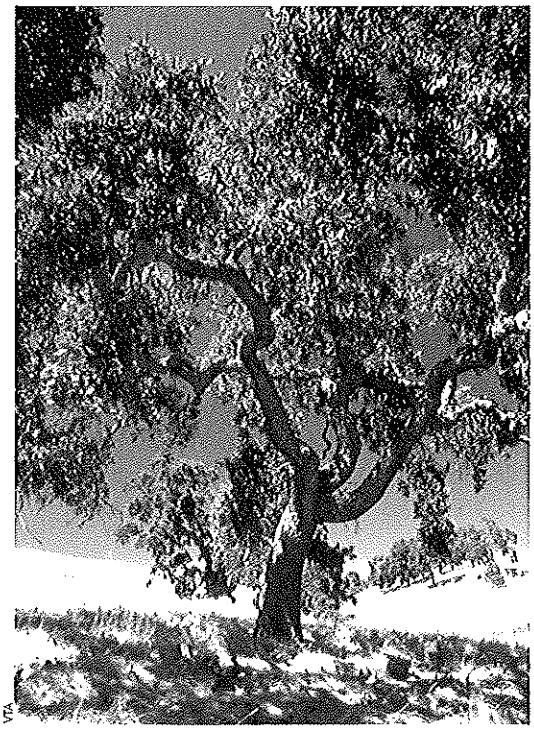
INTRODUCTION TO BEST PRACTICES

Santa Clara County has enjoyed a period of remarkable prosperity and growth. Drawn by jobs in the technology sector, a beautiful setting and a suburb quality of life, people have flocked to the county from around the world. But with growth has come serious challenges to this quality of life. These present day challenges are better understood if viewed in context with the county's historical growth patterns.

Globally renowned high-tech business has become a defining feature of the county.

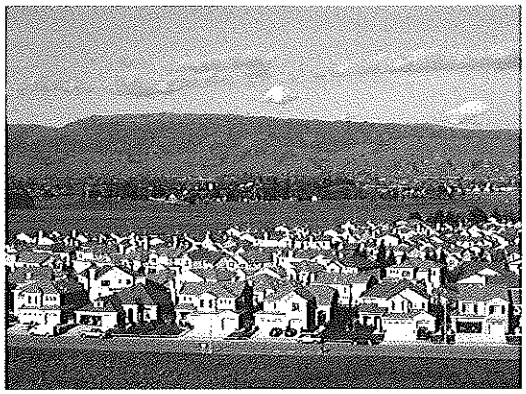
VTP 2020 Goal for Integrating Transportation and Land Use: To provide transportation investments and services that support the maintenance and creation of vibrant urban communities and protect Santa Clara County's natural resources.

Santa Clara County has passed through several distinct periods of growth. In the first half of the 20th century, as the county began transitioning from its agricultural roots to urbanization, it evolved with an integrated mass transit system, which often guided growth. Cities were compact, walkable places, organized around public transportation hubs.


The region's natural setting and quality of life have drawn people from around the world.

Since World War II, much of the county developed with a pattern of spreading things out, segregating different uses, and focusing solely on getting around by automobile. This pattern has created large urban areas within the county where the landscape is generally characterized by "generic" housing subdivisions and shopping malls, where most people are dependent on their cars for even the most basic errands, and where stressful, time-consuming traffic congestion has become a daily fact of life. The urban edge, which offers more housing for less money, and, temporarily, more open space, is a powerful draw. These forces have diluted core areas and perpetuated the spread of urbanization ever thinner and

▶ **If current trends continue, accommodating the automobiles associated with projected growth will require devoting about 11 more square miles of land to parking by 2020—or an area equivalent to the City of Cupertino.**



Current practices favor sprawling housing developments built on the urban edge, where land is readily available.

ever further into virgin countryside, converting orchards to parking lots and farms to office parks.

To be sure, Santa Clara County will continue to grow, and that is not an intrinsically bad thing. The growth in jobs and housing in our communities is the physical manifestation of their vitality and economic health. Whether growth is good or bad depends on how it is used to shape and reshape our communities. The message here is that growth is beneficial if it is used to create and sustain attractive community spaces.

The best way to predict the future is to invent it.

Alan Kay

While the effects of growth are profound and complex, things will certainly get worse if we continue development practices as usual. Following the current paradigm spirals us toward more time lost to simply trying to get around, more land lost to parking and other development, more air pollution, and more infrastructure, resources and energy devoted to moving goods and people over ever-increasing distances.

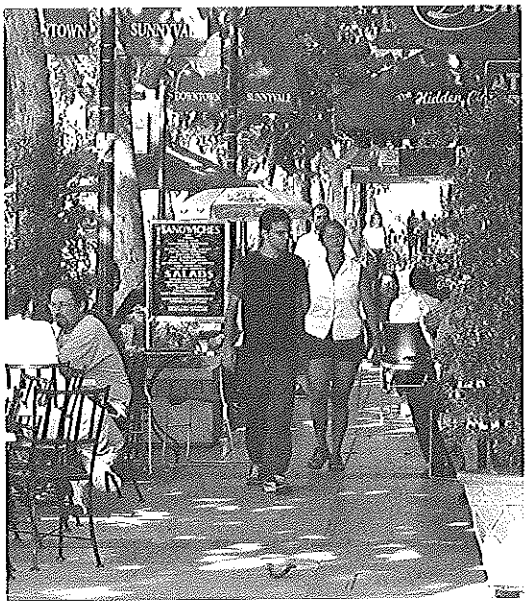
ENVISIONING A BETTER PATH: THE COMMUNITY DESIGN AND TRANSPORTATION PROGRAM

The good news is that things don't need to proceed this way. Solutions to the problems we face are out there. The current pattern can be changed, but only through a new paradigm for growth and development.

The Santa Clara Valley Transportation Authority (VTA) offers such a paradigm through its new Community Design and Transportation (CDT) Program. The program, which emerged from the Valley Transportation Plan (VTP) 2020, Santa Clara County's long-range transportation plan, is an active partnership between VTA and its Member Agencies, the cities and county of Santa Clara. The CDT Program is designed to inspire new thinking about the form and function of growth, broaden and strengthen the range of viable transportation choices, and make the most efficient use of transportation and other resources in the county. It is as much a program for the cities and county as it is for VTA.

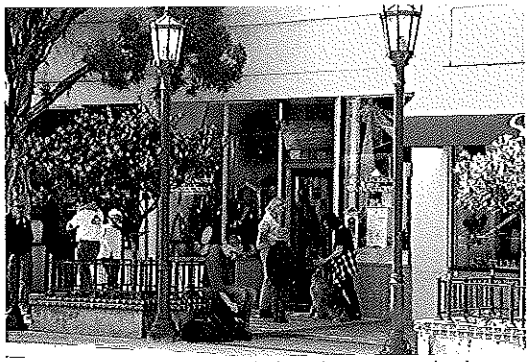
The Program involves:

- Establishing a long-range vision for growth and change in the county that enhances the quality of life for residents and workers.
- Incorporating best practices in planning, design and development activities.
- Identifying the steps that VTA and Member Agencies can take to implement these principles and practices, including changes to policies, technical standards and planning practices.
- Building political momentum for innovative, high-quality development through continuing education, outreach and advocacy.
- Awarding planning grants to member agencies for projects that implement the best practices principles through changes in local plans and regulations.



The CDT Program focuses on creating great places for people.

- Awarding capital grants to member agencies to assist with the development of more livable, pedestrian-oriented communities.
- Linking aspects of VTA's capital grants program to implementing the ideals of the CDT Program.
- Implementing best practices in VTA planning, design and construction projects, and uniting under one program VTA land use activities such as Transit-Oriented Development (TOD), transit facilities design, the Proactive Congestion Management Program, and the Development Review Program.



Unique places that draw people from their cars can be the focus of community life.

Fundamentally, the CDT Program calls for change: change across multiple disciplines, from design to finance to engineering, each of which has overlapping importance to the other disciplines. The CDT Program challenges us to critically reexamine our current pattern of outward growth, and begin working toward creating places that invite pedestrian activity, support transit, and build on the distinct qualities of each community. Through the CDT Program, VTA engages its partners in a countywide dialogue to develop strategies for changing planning and development processes to more consistently support alternative travel modes and efficient automobile use.

There are those who would misteach us that to stick in a rut is consistency—and a virtue, and that to climb out of the rut is inconsistency—and a vice.

Mark Twain

Housing must be high-quality and contribute to the public realm.

This manual supports the Community Design and Transportation Program by illustrating its vision, documenting its tenets, and presenting best practices and strategies for planning, design and implementation. Its purpose is to inform, assist, and inspire elected officials, planners, engineers, planning and review boards, developers, lenders and citizens seeking to improve the relationship between transportation and land use in Santa Clara County. The information presented here is meant for use at many scales by many people — from site plan to city plan and from planning professionals to community groups.

The manual is intended to generate new thinking about the ways we build our communities, and provide tools and policy guidance for evolving

We are beginning to realize that our communities, new as well as old, are not working as they should, and that the built environment that surrounds them has a great deal to do with it.

Richard Moe & Carter Wilkie, Changing Places

them into more livable, sustainable, dynamic and unique places. And lastly, the manual is a living document that will adapt to new information, input from Member Agencies, and policy, planning, and design innovations.

By providing the tools and partnerships necessary for more effective planning, the CDT Program hopes to contribute a range of benefits to Santa Clara County communities, including:

- Enabling more people to accomplish daily activities by foot, bike, or transit in equal comfort to doing so by car.
- Promoting civic and public life by providing memorable gathering places, and concentrating activity and services in community cores.
- Providing a range of housing choices for people with different lifestyles, from condominiums in city centers to graceful townhouse districts and single-family homes.
- Creating vibrant, memorable and sustainable places with unique community identity.

At the heart of the CDT Program is a vision for how our communities can look, feel and function, and how they can better support and enhance our everyday lives. That vision can dispel the myth that sprawling, auto-oriented development is the only way to grow and provides the basis for policies and guidelines to take us in a new direction.

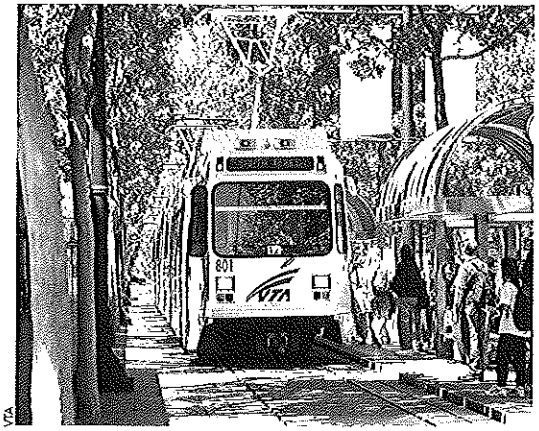
KEY CONCEPTS FOR BEST PRACTICES

Four key concepts underlie the CDT Program effort: *Place-Making, Access by Proximity, Interconnection,* and *Choice.* These big-picture ideas are the basis for the principles recommended in this manual, and work together to address the most pressing issues facing the county as we set out to better integrate the places where we live, work and play, with the ways we move around.

1. Place-Making

One of the consequences of current development patterns has been the erosion of the distinct identity and sense-of-place that sets one district or community apart from the next. Current development patterns tend to lack the human-scale elements that create uniqueness and identity because auto-oriented development does not value design at that scale. Much of our built environment is designed to be experienced from a fast-moving car, and is intimidating, or even dangerous for pedestrians.

The CDT Program intends to refocus attention on the making of memorable places and with making whole communities rather than an assemblage of individual buildings and projects. Since the character of a place is inextricably linked to



Transit can help define community character and establish streets as places.

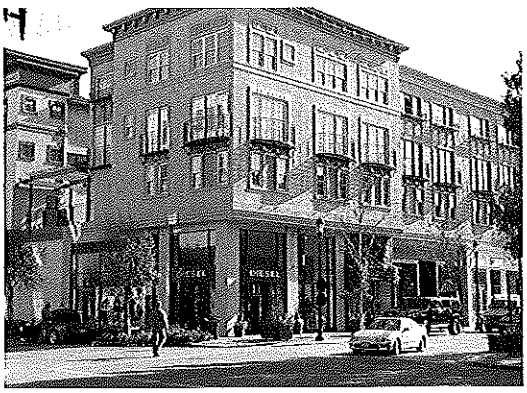
Best practices aims to reawaken and revitalize public spaces.

whether or not that place is populated with people, *place-making* is all about planning and designing buildings and spaces in such a way that people want to be there. The CDT Program proposes a return to human-scale design, to the details that are inviting to pedestrians and establish character. Issues such as traffic impacts, overall land-use program, and the fiscal desirability of the project are important considerations, but design details also warrant attention. To make good places for people, then, *the details do matter.*

Comfortable walking environments are not only attractive and supportive of public life, they are also critical to making transit work, because transit users must get from stops and stations to their destinations on foot. In this sense, what is good for people is good for transit.

2. Access By Proximity

The purpose of transportation is not to move people around for the sake of it, but to facilitate convenient access to the services, activities and experiences people want. The more spread out these services are, the more travel, and hence the more infrastructure is required. When complementary land uses are clustered together, trips can be combined or even eliminated, using limited transportation resources more effectively. This also helps achieve the kind of critical mass that makes a vibrant public life possible.

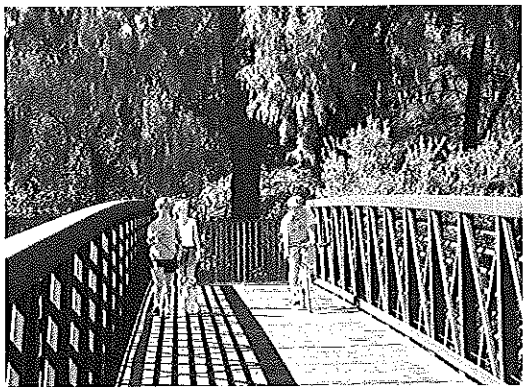


Mixing and intensifying land uses brings services and activities closer together, thus reducing the need for travel.

Many of the practices recommended in this manual are intended to support *access by proximity.* Locating land uses with careful consideration of access by foot, bicycle, transit, and automobile, makes more efficient use of Santa Clara County's land, transportation infrastructure, public funds and private investment. In other words, implementing best practices is *doing more with less.*

3. Interconnection

Although good places emerge from the interplay of many elements — buildings, the activities contained within, streets, open spaces, and transportation services — these elements are often designed by different entities in isolation from one another, each with its own agenda. In well-designed



Providing safe and comfortable connections for all modes contributes to making great places.

areas, residential subdivisions are connected with, not walled off from, nearby stores and activities; transit stops, stations, and centers are functional intermodal transportation nodes; and station-area housing is dense and attractive, but also easily accessed by foot from the train or bus.

In each case, many of the elements critical to the integration of transportation and land use are in place, but institutional and physical barriers keep them apart. Many of the recommendations in this manual are intended to identify and reach across those barriers to make the crucial

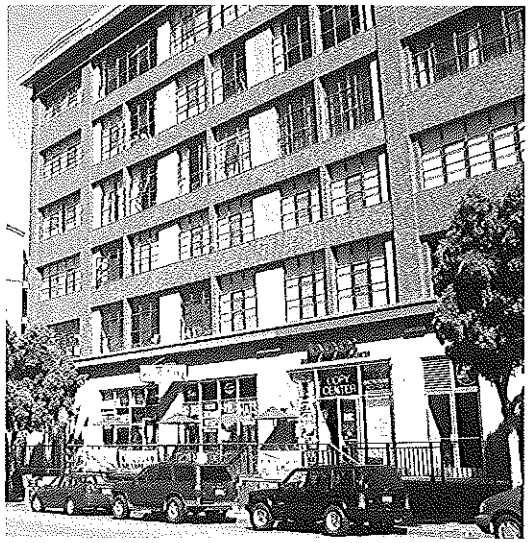
difference between simply "close together" and truly integrated.

Through an integrated "systems" approach, *interconnection*—of land use, streets, pedestrian networks, transit modes, and development projects—not only forms functional and coherent districts within the community, it also helps wring a great deal more service from existing transportation resources while creating more comfortable and livable places.

4. Choice

Residents and workers in Santa Clara County are exceptionally diverse, but the range of transportation and housing choices does not reflect that diversity. Basic choices about what kind of home to live in, where that home is located, the character of the surrounding community, and the means of getting around, are highly constrained for most people in the county.

Current development patterns reinforce a "one-size-fits-all" model of growth: single-family homes, drive-alone commuting, and large, campus-style employment centers.



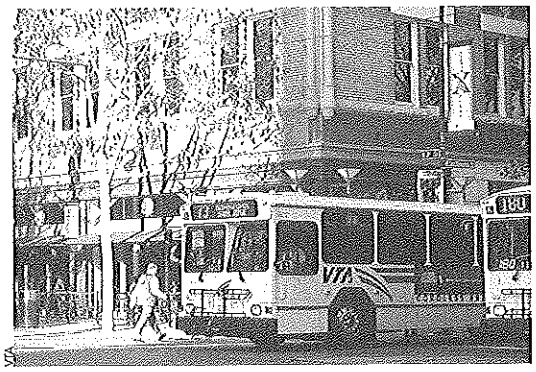
A choice of housing types, such as these live-work lofts with ground-floor retail, supports a range of incomes, cultures and lifestyles.

But it is not enough simply to build apartments or provide more bus service—we must provide the kinds of environments that make these choices desirable to a broader cross-section of the county's population. If presented with well-designed buildings, and assured the presence of quality public spaces and local amenities that can thrive in denser areas, many people would choose the amenities of city living over the expense of a single-family home. And many more people will commute by transit, given frequent, comfortable service and workplaces served by nearby shops and restaurants. Broadening the range of *choices* available to Santa Clara County denizens is fundamental to integrating transportation and land use, and strengthens the recommendations in this manual.

BUILDING SYNERGY

It is important to keep in mind that one development project can do little to change the character of a neighborhood or city. Likewise, focusing on only one of these four concepts will not suffice; they are not discreet agendas. Rather, they are interrelated and mutually reinforcing, and, when practiced in unison, work synergistically to create high-quality communities. It is this *synergy* that produces wholesale positive change that is far greater than the sum of the individual parts. So together, these concepts summarize the best practices vision, and will be referred to throughout the manual.

This much is clear: nothing will change overnight. In recognition of this reality, the CDT Program seeks to create a long-range vision, and to pursue that vision through a consistent program of implementation. By forming a clear vision about how we want to grow, the CDT Program encourages each individual development decision to become a step toward a more integrated, more efficient, and ultimately, more livable Santa Clara County.



A comprehensive multimodal transportation system creates options and reduces automobile dependence.

WALKING THE BETTER PATH: THE ROLE OF LOCAL GOVERNMENT

Best practices calls upon many different segments of the community to change the way things are done. Local government is perhaps the most critical.

Full realization of the best practices vision is not possible without the participation of local governments. Not only do their policies determine whether or not development guided by best practice principles is allowed to occur, but local government is the arena in which almost all facets of the built environment—from long-range planning and community participation to street standards and building permits—come together. Local place-making, and its ultimate effect on transportation and land use, rests on the policies of local government.

Involving stakeholders in the decision-making process is a key component of best practices.

While the basic design tenets of livable, walkable, transit-supportive communities are increasingly well known, putting them into practice remains an extraordinary challenge. A wide range of actors, issues, and policies affect the built environment, and most of these are tightly constrained and possess momentum that is resistant to change.

This manual contains a range of implementation tools that local governments can apply in their planning, development, and regulatory efforts to help realize the best practices vision. These tools stem from, and are meant to help overcome, obstacles faced by localities as they set out to effect change.

This vision will not be the same everywhere. It is the function of local governments to decide which best practices principles are appropriate for their areas. But in the end, the goal is to weave best practices into the fabric of planning and design activities—so that growth in the service of a more livable county is the norm, rather than the exception. VTA is committed to building partnerships with local governments and to working together to make positive change. Figure 1–1 on the following page provides an initial list of actions governments can take.

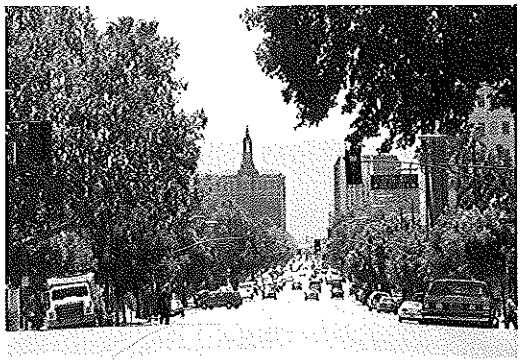
THE COMMUNITY DESIGN AND TRANSPORTATION FRAMEWORK

Untouched lands at the urban fringe have generally been thought of as leading candidates for development. However, Santa Clara County's mature urban areas also represent prime development opportunities. In fact, urban sites that are vacant or currently underutilized offer advantages over outlying areas because they are already connected with urban services and infrastructure. Moreover, accommodating growth in the urban core plays a critical role in the protection of valuable open space at the edge.

This is a list of actions that local governments can take to implement best practices. Some of these actions are simple and readily executed in the short term; others are more complex and lengthy endeavors. But each action plays an important role. Achieved in combination, the actions on this list will help to bring the benefits of best practices to the community.

Figure 1-1 Local Government Action Checklist

- ☐ Perform **outreach** to create community awareness of best practices and **educate** the community on what best practices means for them. Also, perform early public outreach for potentially controversial land development projects.
- ☐ Convene a **community visioning** process to build community support for best practices.
- ☐ Identify key strategic **focus areas** in the **General Plan**. These will be the core; corridors and station areas where applied best practices will have the greatest return.
- ☐ Write **focus area plans** to guide the type, intensity, and design of new development in these strategic areas.
- ☐ Publish and use **architectural and urban design standards** that reflect best practices to communicate how new development should look and fit within the community.
- ☐ Pursue **catalytic land development projects** in focus areas. Form public-private partnerships to implement keystone projects that will begin the process of implementing the focus area plan.
- ☐ Lead by example by building **exemplary public projects**. Fully employ the principles of best practices when developing civic projects such as government buildings, over which the local jurisdiction has the most control.
- ☐ Revise **zoning codes** to legalize and encourage best practices.
- ☐ Revisit **street standards** to allow flexibility and sensitivity to context in street design.
- ☐ Revise **Level of Service (LOS) policy** to allow multimodal transportation improvements in addition to vehicle capacity improvements.
- ☐ Revamp the **permitting process** to emphasize and favor best practices. Get involved as early as possible in the process to ensure that best practices concerns can be addressed adequately.
- ☐ Redouble **maintenance** efforts to keep the public realm safe and inviting.
- ☐ Build **internal, consistent support** for best practices **across all departments** including: community development, traffic, utilities, maintenance, garbage collection, fire and police. Best practices cannot happen without full, agency-wide support.
- ☐ Join the **call for governmental support** of smart growth at the **regional, state, and federal levels.**



Corridors such as Santa Clara Street offer great potential for linking residences, businesses, cultural activities, and entertainment centers.

These sites constitute the new frontiers for growth, and are the focus of the CDT Program.

In VTP 2020, VTA and its member agencies identified potential future growth areas and defined them as Cores, Corridors, and Station Areas. The map in Figure 1-2 (see foldout at the end of this chapter) identifies these Cores, Corridors and Station Areas. These areas are the most likely to benefit from intensification and represent key opportunities for providing multimodal transportation alternatives that can serve the needs of both new and existing residents and workers. Local jurisdictions are encouraged to add cores or corridors where intensified development and multimodal investments may be directed as opportunities arise.

- **Cores** are districts that contain concentrations of residential areas, employment sites, and other destinations such as retail and cultural facilities. They are further distinguished as regional cores such as Downtown San Jose and Palo Alto/Stanford, county cores such as downtown Mountain View and Sunnyvale, or local cores such as San Jose's Willow Glen area, or downtown Los Gatos.

- **Corridors** are linear in shape, centered on a single street or transit line that often functions as the "spine" of the surrounding community. Examples of corridors include El Camino Real, Stevens Creek Boulevard, and Guadalupe light rail along North First Street.

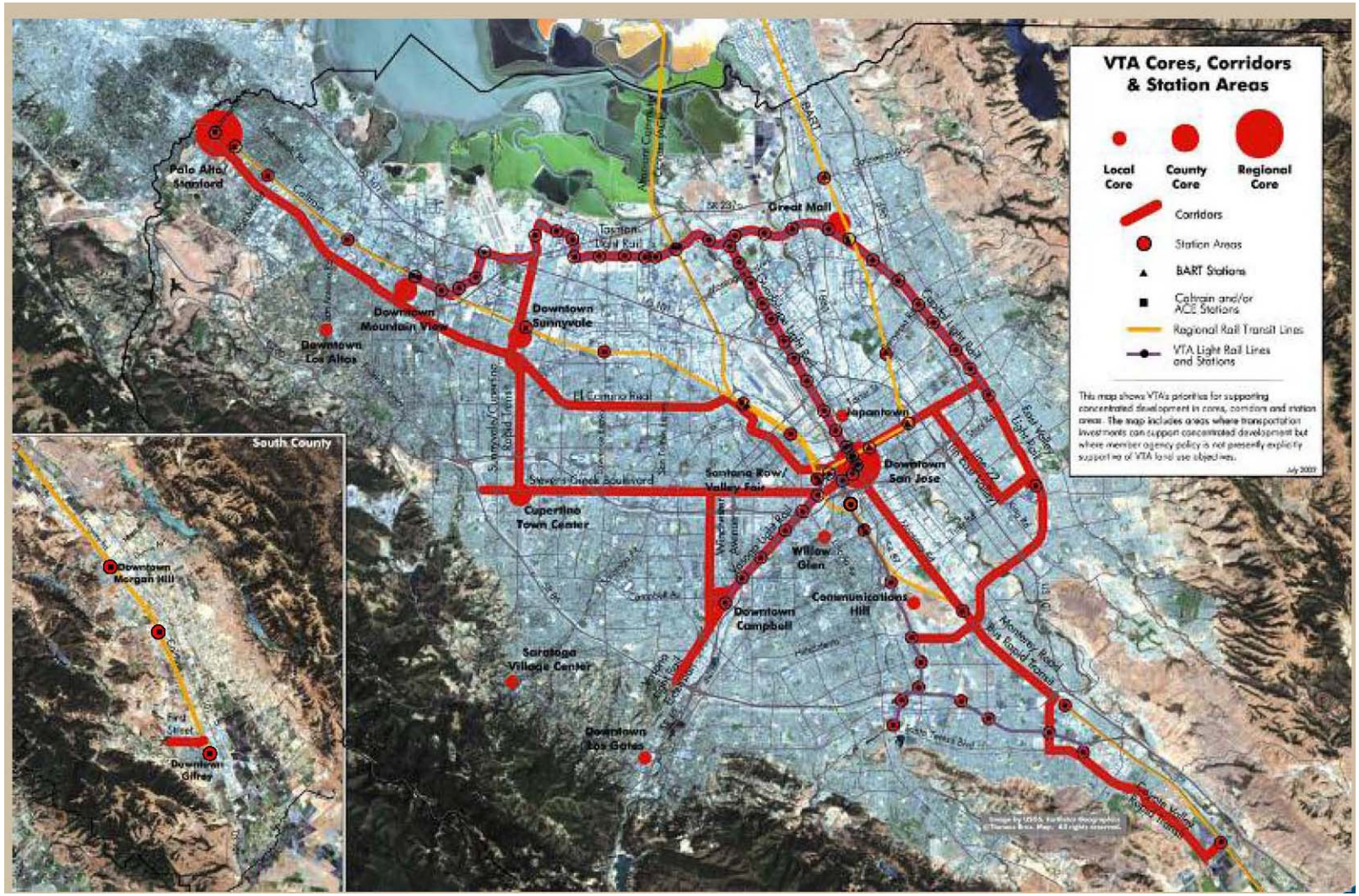
- **Station Areas** are locations adjacent to rapid transit stations that already serve or will serve as a focal point for new and infill development. Examples include the Whisman LRT Station and the San Antonio Caltrain Station.

Further description of cores, corridors and station areas can be found in Appendix D.

NAVIGATING THE COMMUNITY DESIGN AND TRANSPORTATION PROGRAM MANUAL: A USER'S GUIDE

This manual is structured to guide the reader from global, big-picture concepts to specific, how-to-get-this-done concepts. It is organized into seven primary chapters and several supporting appendices. After this introduction, Chapter 2 defines the best practices principles. Chapter 3 presents best practices for development and design, and Chapter 4 presents a multimodal approach to streets. Chapter 5, *Model Places,* shows how it all fits together and what implementation of best practices can look like. Chapter 6 defines the role of local government in the implementation of best practices, and Chapter 7 identifies opportunities for change featuring strategies and tools for overcoming commonly encountered barriers to implementation. The appendices present more detailed information and other resources for the topics covered in the manual.

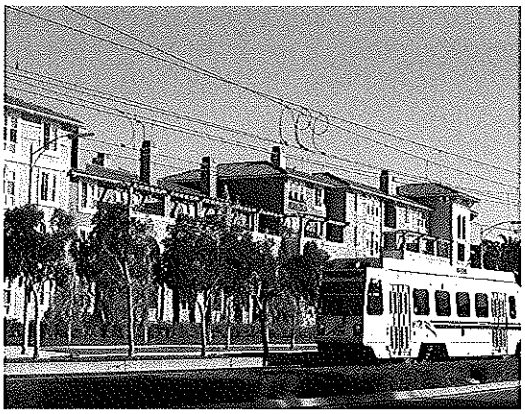
The manual has been designed to recognize the overlaps while allowing readers to pick and choose material most relevant to them. Each section within the manual cross-references other sections, and readers are encouraged to jump to particular sections of interest. The table on the following page ("How to Use this Manual") provides a guide to help readers navigate their way through the manual.


VTA Cores, Corridors & Station Areas
Local Core
County Core
Regional Core
Corridors
Station Areas
BART Stations
Caltrain and/or ACE Stations
Regional Rail Transit Lines
VTA Light Rail Lines and Stations
This map shows VTA's priorities for supporting concentrated development in cores, corridors and station areas. The map includes areas where transportation investments can support concentrated development but where member agency policy is not presently explicitly supportive of VTA land use objectives.
July 2003
South County
Palo Alto/ Stanford
Downtown Mountain View
Downtown Los Altos
Downtown Sunnyvale
Tasman Light Rail
Great Mall
El Camino Real
Japantown
Downtown San Jose
Santana Row/ Valley Fair
Stevens Creek Boulevard
Cupertino Town Center
Willow Glen
Communications Hill
Downtown Campbell
Saratoga Village Center
Downtown Los Gatos
Monterey Road Bus Rapid Transit
Downtown Morgan Hill
Downtown Gilroy
BART

chapter 2

BEST PRACTICE PRINCIPLES FOR INTEGRATING TRANSPORTATION AND LAND USE

The Community Design and Transportation (CDT) Program vision is comprised of a series of best practice principles that, when implemented concurrently, help establish community character and identity, and encourage residents and workers to walk, bike and take transit. These time-proven best practice principles build upon and expand the big picture, key concepts for the CDT Program described in Chapter 1, and create the foundation for the design practices presented in the following chapters. By their nature, these principles overlap and are designed to be implemented in conjunction with the others—no single principle is meant to be carried out in isolation. The success of best practices rests upon the synergy created as the principles are implemented together throughout Santa Clara county communities.



Infill development around transit can reduce traffic congestion and divert growth from the urban fringe.

The critical antidote for sprawl is density, concentration and the rebuilding of centers. In essence, forging reconnections.

Roberta Brandes Gratz and Norman Mintz, Cities, Back From The Edge: New Life for Downtown

Principle 1. Target growth to cores, corridors and station areas

Local governments should target new growth to cores, corridors and stations areas (see map in Chapter 1) in order to capitalize on existing investments in infrastructure including roads and highways, transit and other public facilities such as water and sewer lines. This principle, used in conjunction with the principles below, such as intensifying land use and mixed-use development, provides a variety of benefits for cities.

First, focusing growth around transit stops reduces the need for residents to drive. A Transit-Based Housing Survey conducted by VTA and the Silicon Valley Manufacturing Group (SVMG) revealed that Light Rail corridor residents use light rail and bus combined as their predominant commute mode more than five times as often and have lower car ownership rates compared with residents countywide. Another study found that people living near Bay Area Rapid Transit (BART) stations were five times as likely to commute on transit than the average resident of that community. Secondly, infilling and redeveloping existing areas diverts growth away from the urban fringe, conserving open space. Finally, focusing growth to these areas may reduce the need for local governments to build—and then maintain—costly new infrastructure. In these ways, focusing growth on cores, corridors, and station areas is about *doing more with less.*

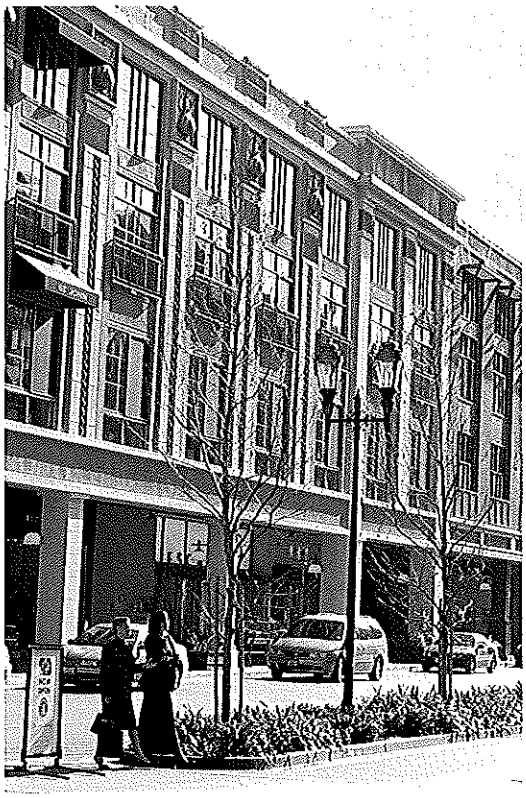
Principle 2. Intensify land use and activities

High density is a key feature of places that are vibrant, functional, and walkable. While not appropriate everywhere, placing a higher intensity of uses on less land in strategic

locations, particularly in cores, corridors and station areas, creates the critical mass of activity that is necessary to cultivate viable transportation options, and ultimately, a sense-of-place. High-intensity locales provide a wide ridership base, allowing transit to serve more destinations and riders with the same infrastructure. Higher density also helps to make places walkable—and where people can walk, nearby businesses thrive, and public spaces, particularly streets, come to life.

We yearn for real communities, for places to live and work that are worthy of our affection.

James Howard Kunstler,
The Geography of Nowhere

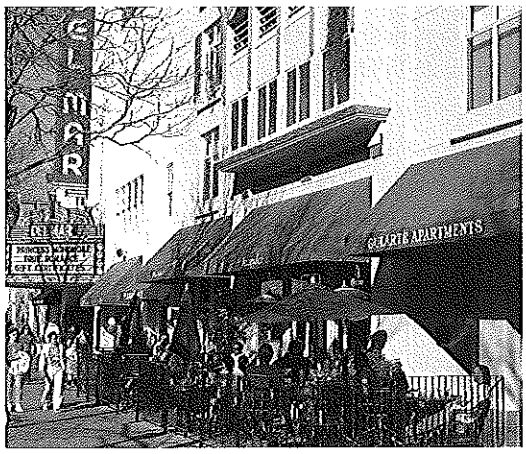


Increasing the intensity and diversity of land uses promotes transit use and helps to create more vibrant, walkable communities.

Since cities and neighborhoods in Santa Clara County have diverse identities, populations, and needs, higher density may mean different things to different communities. For example, a residential development in downtown San Jose will have a higher density than one in Willow Glen, but both help enhance the surrounding neighborhoods. Regardless of the location, good urban design and architecture must accompany density increases to make communities feel comfortable, attractive, and safe for residents and visitors. Used together, intensification and good architecture and urban design can help increase public acceptance of higher-density development.

Principle 3. Provide a diverse mix of uses

Providing a mix of compatible uses within close proximity of each other can reduce the need for automobile trips and enhance community livability. This is especially true when implemented in conjunction with focusing growth to cores, corridors and station areas. For instance, retail such as bookstores, restaurants, and coffee shops included in or within walking distance to commercial projects allows employees to eat lunch or run errands without driving, a true application of *access by proximity.* This, in turn, makes it possible for people to leave their cars at home and commute by transit, foot or bike instead. In residential areas, the presence of a corner store or a café helps reduce the need for additional automobile trips. As an example of synergy at work, it also serves as a gathering place for residents. Furthermore, mixed-uses in close proximity gets people out walking in the



Mixing living spaces with ground-floor retail and entertainment brings activities within easy walking distance and creates places that are active all day.

neighborhood—a necessary ingredient for bringing activity and vibrancy to places.

There are examples of successful new and old mixed-use buildings and neighborhoods within Santa Clara County. The downtowns of Mountain View and Palo Alto, and neighborhoods such as Willow Glen, are walkable mixed-use areas developed around transit and have maintained a prominent sense-of-community over time. A key to providing a mix of uses is to allow for mixed-use projects in the first place, which often means revising restrictive zoning codes and development standards, or creating new ones altogether.

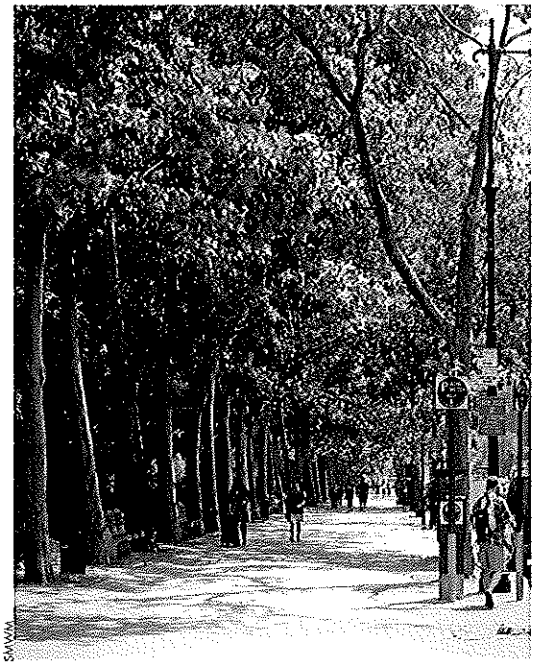
Principle 4. Design for pedestrians

The hallmark of great places is the ability to walk between destinations. Therefore, a central principle of the CDT Program is to design for pedestrians. The county's transportation system and built environment currently focus on cars rather than people. But the beginning and end of every trip involves walking, regardless of the mode used in between.

The CDT Program aims to design the entire built environment, from streets and sidewalks to buildings and civic spaces, for human-scale movement. This principle, coupled with a diverse mix of uses and quality design, again helps to create *synergy.* Pedestrian-oriented places encourage walking and exploration, enlivening public spaces. Transit stops are public spaces, too; and safe, direct and visually interesting connections to and from stops encourage more transit use and reduce the need for driving.

Designing for pedestrians means designing buildings that people can easily and comfortably access on foot. Such design features include orienting buildings and entrances to the street from where pedestrians, including transit riders, are likely to come, minimizing setbacks to create an engaging streetscape, and placing uninteresting parking lots at the rear of buildings. Other pedestrian-oriented design elements include safe and direct walking routes, wide sidewalks, and amenities such as street trees, lighting and benches. These design elements can benefit parking lots as well as streetscapes.

Even simple design features such as connections to public sidewalks can make developments more friendly to pedestrians.



Safe and comfortable pedestrian spaces, such as tree-covered sidewalks, encourage walking.

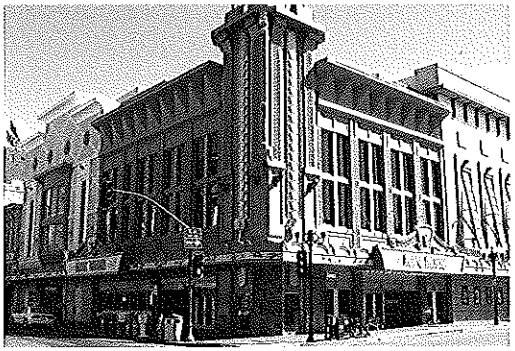
The future of our civilization depends upon our ability to select and control our heritage from the past, to alter our present attitudes and habits, and to project fresh forms into which our energies may be freely poured.

Lewis Mumford

Principle 5. Design in context

Design with attention to local context helps communities create a unique identity and forge the connections that establish a continuous urban fabric. Design in context means that the materials, design details, and architectural styles reflect and reinforce the unique character of the region and are appropriate for the neighborhood. Not just for buildings though—sidewalks, streets, and civic spaces like urban parks also deserve the same design rigor. And finally, design in context is also about the relationships between buildings and the public spaces that surround and connect them.

This infill project, Mountain View's "The Crossings," redeveloped an obsolete shopping center into a compact, mixed-use development near transit.

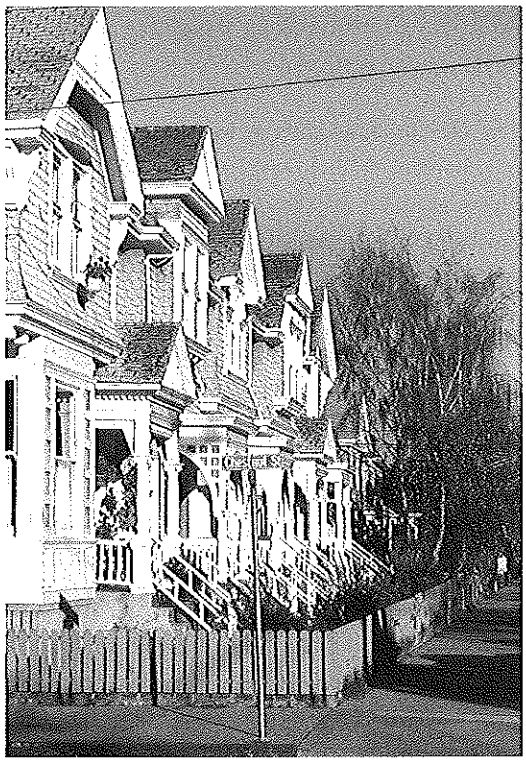


The design of new development should reflect the context of its surroundings. The scale and design elements of this new theatre complex reflect the context of adjacent buildings in San Diego's historic Gaslamp Quarter.

Principle 6. Focus on existing areas

Greater attention should be directed toward using land already dedicated to the urban fabric more efficiently before consuming additional land in outlying areas. Infill development, redevelopment, and brownfield sites in cores, corridors and station areas and throughout the county present ideal opportunities for implementing best practice principles. Many of these sites are in established communities with long and rich histories, but some have fallen into disrepair over the years.

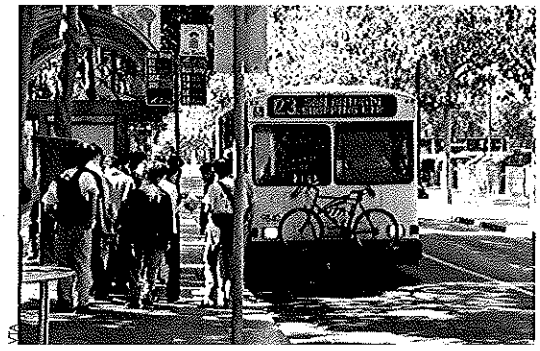
Through the use of vacant, underutilized and abandoned areas, the redevelopment and adaptive reuse of existing structures, and sensible density increases, urban infill projects offer the promise of accommodating much, if not all, of the county's housing needs and anticipated population growth. Infill projects, generally consisting of higher density mixed-use and residential developments, can also help transform underutilized areas into centers of diversity and activity.



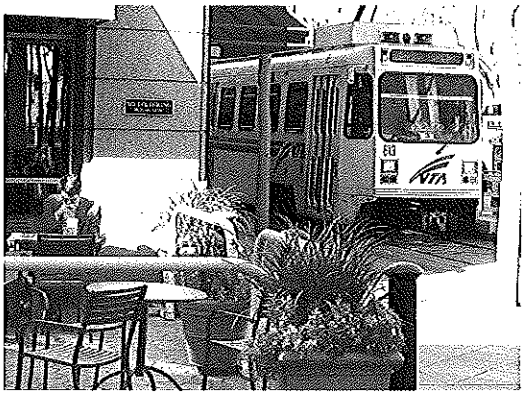
Rehabilitating existing buildings and re-using sites is an efficient use of infrastructure, and can revitalize older neighborhoods.

Sustaining the community is just as important as improving it, and we need to take better care of already developed areas. After-care and maintenance programs are as vital as good planning and design to creating a sense-of-place and community. We must follow through with the time spent on improving areas by persistently maintaining them. This is especially important with regard to the pedestrian environment where people interact closely with their surroundings and notice details such as landscaping, pavement condition and architectural treatments.

The outcome of focusing on existing areas promises the development of places with rich architectural, urban design, historical and community texture. Urban infill allows communities to evolve organically, mostly through small-scale developments implemented incrementally over time. It also allows cities and communities to focus on creating places of lasting value; ones that continue to mature and improve through the years.



Extensive bus routes, bicycle facilities, and a continuous pedestrian network are key components of a multimodal transportation system.



The light rail system is an example of VTA's commitment to providing viable alternatives to the automobile.

Principle 7. Create a multimodal transportation system

Great places are ones that offer a multitude of ways to get around. The county's best response to congestion that continues to outpace capacity expansion is to offer residents and workers the option to walk, bike, or take transit to reach their destinations. Provision of viable transportation alternatives is not about destroying the automobile; rather, it is about balancing the needs of automobile movement with the needs of other modes.

A multimodal transportation system consists of an interconnected bicycle network, continuous pedestrian ways, and a comprehensive transit network. It also includes intermodal provisions that allow travelers to move easily between modes, for instance, clustering amenities and activities where many modes meet, and good pedestrian connections to transit stops. In addition, bicycle parking facilities, buildings designed for pedestrian activity, and direct pedestrian routes through project sites to popular destinations also help to complete a functional multimodal transportation system.

Streets play a central role in a multimodal system, and are not just for cars. The extent that a particular street is multimodal will depend on its location, related land uses, and function within the larger transportation system. Some roads will give prominence to the automobile and movement of freight while others will focus on transit service and the pedestrian environment. The final outcome is a balanced street system that serves all users well, regardless of their mode of travel.

Once public and private spaces are distinguished from each other they can begin to play complementary roles in urban life; a well-organized city needs both.

William J. Mitchell,
City of Bits

We live today in cities and suburbs whose form and character we did not choose. They were imposed on us, by federal policy, local zoning laws, and the demands of the automobile.

Andres Duany,
Suburban Nation

Principle 8. Establish streets as places

In addition to being part of the multimodal transportation system that moves people and goods, streets are the most abundant public space in cities. Streets are not just thoroughfares for cars; they can also be the 'outdoor living room' of the community, the setting for neighborly chats, childhood game-playing, and evening strolls. They are an integral part of a community's urban space and identity.

Streets are our most abundant public spaces. This example in Italy is a model of excellence in making those spaces high-quality and lively.

To function effectively as places, streets must balance the needs of people on the move with those of people at rest. Planning for these multiple purposes requires changing the way we think of streets. It calls for street and street system design that distributes the traffic load among more, skinnier, streets, rather than saddling a few, wide streets with it. This strategy avoids overburdening any single street and allows for better attention to community-oriented design elements, such as wide sidewalks, public spaces, landscaping, and street trees. The implication here is that streets also need to be designed in context with their adjacent land uses—neighborhood streets should have a much different look and feel than a regional expressway, and a major arterial serving a mixed-use corridor will have different design characteristics than a State Highway.

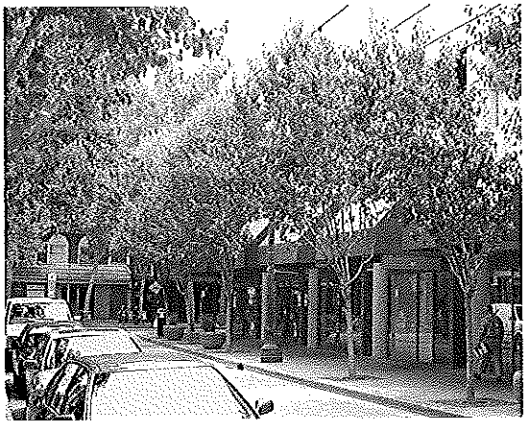
Principle 9. Integrate transit

It is often the case that transit is relegated to the periphery of urban spaces, outside the soundwalls or at the edge of high-speed roads. Only when transit is fully integrated with the community can it function optimally. Integration can be achieved either by extending community fabric out to connect with transit facilities, or by bringing transit service directly into the heart of the community.

Light rail and commuter rail stations can become vibrant centers of community activity, when surrounded by appropriate, intensive land uses with buildings that focus on the station and connect to local destinations through high-quality pedestrian ways. Integrating bus transit involves considering the operation and location of transit early in the design process, locating transit stops near major buildings, clearly connecting the stop to building entrances, and providing amenities for people waiting for the bus. After all, transit stops are civic spaces too and can thrive only if designed as such. In all instances, combining transit with neighborhood amenities such as daycare centers, amenity retail, restaurants, civic services, and entertainment centers blends it with the community and creates a sense of identity for transit. Then instead of being considered a nuisance or a mode for someone else to use, transit becomes a highly-valued community asset.

Transit stops, such as this one, should be integrated into the design of new projects, not tacked on later as an afterthought.

Integrating new housing with transit by design makes transit a valued community asset.



Best practices promotes managing parking to reduce the impact of automobiles on the urban environment. This example shows a parking garage over retail in downtown San Jose.

Principle 10. Manage parking

Parking is a vital component of best practices because it affects both the built environment and the transportation system. Parking takes up enormous amounts of land and is perhaps the single most important element influencing the design of urban areas. Parking helps dictate the character of a place, determining whether it will feel isolated from adjacent uses or integrated into a continuous urban fabric. Every suburban office park and shopping center provides evidence of how parking can dominate the landscape. Accommodating the coming employment and population growth with current policies will further increase the amount of the county's land dedicated solely to storing cars. Free, abundant parking also influences whether people drive to their destinations. If parking is easy to find and comes at no direct expense to the driver, driving will always be the preferred transportation choice.

A key to realizing the CDT Program vision is to manage parking in a way that does not dominate mode choice decisions or the built environment. For example, locating parking at the rear or on the side of buildings, or even within buildings as shared-use garages, can create a more hospitable urban environment. Sponsoring Transportation Demand Management (TDM) programs can make other modes more attractive relative to driving alone, and shared or common parking among several buildings can reduce the total amount of land devoted to cars within a neighborhood. Any parking management path will require institutionalizing reductions in parking supply and demand.

Expansive surface parking lots isolate neighboring developments from one another and create barriers to walking and transit use.

The planning profession's commitment to parking requirements is based not on education and science but on motorists' yearning to park free.

Donald C. Shoup,
The Trouble with Minimum Parking Requirements

Cores and Districts

The distinction between a core and a district is often nebulous. They are discussed here synonymously. A district is defined as an identifiable portion of the city, such as a regional downtown core, a neighborhood core, a residential neighborhood, an industrial district, or a station area. A district usually has an understandable boundary, a particular concentration of uses, and accommodates a number of buildings, sites, and projects within its boundaries. See Appendix D for further definition of core areas.

A good district meets local needs locally while considering and providing access to other parts of the city and region. By its functional—and sometimes aesthetic—unity, it emerges as an identifiable part of the city, but is most often not built in a single effort, and may not even have a name or a distinct boundary. When most development took place one building at a time and reasonable walk distances limited travel distances, distinct districts often emerged organically, and many of these are still in beloved use.

Today, "organic" development has been regulated away, and districts are rarely conceived of and developed as whole entities. It is much more common for adjacent single-use projects to be developed in isolation, missing the opportunities for interconnection, clear organization, convenience, and integration that typify an active district. In this context, districts must proceed from a clearly articulated vision, and be the focus of thoughtful planning, design, and targeted investment in public amenities.

One of the most basic types of district is the residential neighborhood. A neighborhood is a great deal more than a subdivision or group of homes in close proximity. A good neighborhood offers a center with the basic amenities of daily life, including schools, a mix of housing types, open spaces, public gathering places, and basic commercial services. The center also serves as a point of entry into the transportation systems that serve the region.

The arrangement of buildings, streets, open spaces, and land uses at the district level is critical to realizing the key concepts that underlie best practices—creating a sense-of-place, providing access by proximity, interconnecting all modes of travel, and proving a range of choices in where we live and work.

▶ A good neighborhood offers a center basic amenities of daily life, including schools, a mix of housing types, open spaces, public gathering places, and basic commercial services.

Practice 3-22: Conceive and design whole districts, providing a high level of connectivity and integration

Because a district is often made up of several different development projects, if it is to function well, it is important to consider its overall growth and integration. Careful advance planning can clarify expectations for development, while public improvements can establish a framework for the district's identity and function as is grows.

Circulation throughout the district should be planned to allow direct, easy movement by foot and bicycle. The provision of transit service should be carefully evaluated, and land uses should reflect their location within the district and the region, emphasizing higher densities and a range of services and amenities near transit lines, nodes and district cores.

Actions

- Establish planning and design parameters in general and specific plans. Identify and define districts in general and specific plans and develop policies to support their development and refinement.
- Plan for transit. If existing transit services are nearby, or if future services are planned, the developer and jurisdiction should work with VTA to evaluate service-planning options and provide for bus stops, train stations, and transit 0centers. If transit service is not nearby, planning and design of streets (including rights-of-way for stops or stations), utilities, and

Unfortunately, for architecture, every district of the modern city tends to become a business district, in the sense that its development takes place less in response to human needs than to the chances and experiences of scale.

Lewis Mumford

Planning whole districts can help ensure that individual development decisions contribute to the public good.

pedestrian facilities should not preclude it in the future. See Appendices A, B, and C on community planning for bus, rail and station areas.

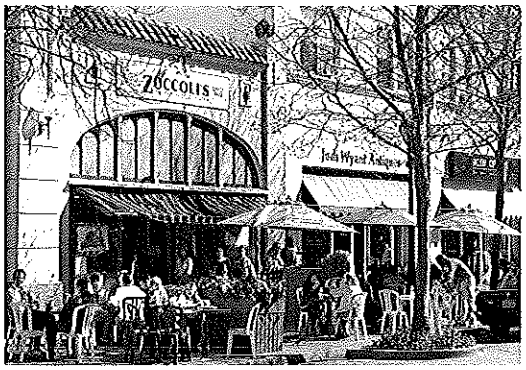
- Provide district-wide continuous pedestrian circulation, particularly to the district center and transit facilities.
- Design individual development projects and sites to seamlessly interconnect and contribute to the district.
  - —District-level planning should precede development projects wherever possible.
  - —Building densities in land use programs should reflect district needs, scale, priorities.
  - —Linkages within and between districts, especially to major activity centers and transit connections, should be emphasized.
  - —Urban design guidelines should be established to maintain or create design themes and visual unity.

Practice 3-23: Organize districts around an identifiable center, where transportation, basic services and public gathering places are concentrated

Part of considering districts as whole entities is providing some degree of hierarchy within them. A center, however modest, gives a district a distinct geography and landmarks, and provides residents and workers with a clear location for errands, transportation resources, and public gathering. A clear center also supports *access by proximity* by clustering uses in an easily accessible location, and provides an ideal hub for interconnecting different travel modes.

Actions

- Encourage higher-density development in the core of the district.
- Concentrate district services and amenities near transit to promote combined trips and increase activities.
- Ensure sufficient density to encourage walking and biking, and support frequent transit service in district cores whenever possible.
- Ensure that developers build to at least planned densities.
- Identify and reinforce district cores with consistent attention to creative urban design.
- Provide urban design guidelines that establish at least the basic design elements and desired design goals for jurisdictions.
- Manage parking and transportation demand in core areas (For more information on parking and transportation demand management, see the Project section of this chapter, Chapter 7 on Implementation, and Appendix H.)



Compact, walkable district centers can become places for meeting and community activities.

- Provide bicycle facilities.
- Provide landmarks and other visual cues.
- Consider local and regional pedestrian plans to develop programs that interconnect facilities and form identifiable networks.

Practice 3-24: Allow complementary land uses appropriate to district type

The appropriate character, density, and mix of land uses will vary greatly from district to district. Residential districts in downtown areas will be much denser than those in surrounding communities, but each can be designed to effectively support the needs of its residents and workers.

In many districts, a single land use predominates, whether single-family housing in a bedroom residential district or commercial office space in a downtown financial district. However, often absent are complementary land uses that can serve needs related to the predominant land use. Office workers need to eat lunch, run basic errands, or make use of office support services like print shops. Convenience retail or a local café can enrich a residential neighborhood and provide focal points for local life, allowing a night out on the town or some errands to be accomplished on foot. Permitting and encouraging appropriate complementary uses allows *access by proximity*, supporting the daily activities of residents and workers with less travel, and less dependence on the automobile.

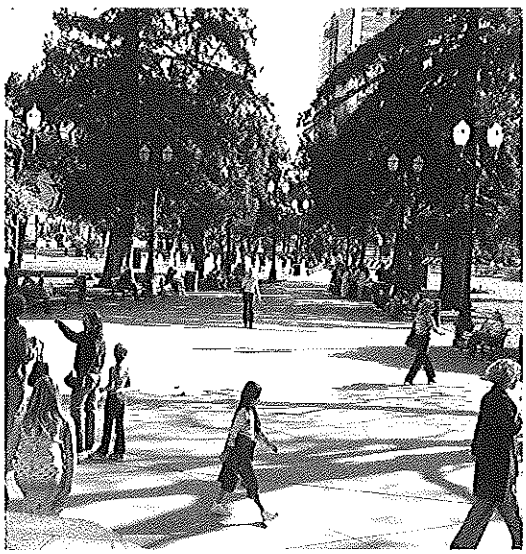
Mixing uses can be a great way to blend old with new. This plaza adjacent to the Pantheon in Rome, Italy, offers a fountain with a 3,000 year-old Egyptian obelisk and is surrounded by apartments of all shapes and sizes and retail spaces on the ground floor—there's even an tactfully placed MacDonald's restaurant nestled behind the umbrellas.

Actions

- Identify and encourage a variety and mixture of land uses—the predominant use should not be the only use.
- Include schools, places of worship, cultural attractions, community centers, amenity-retail, local cafés in residential neighborhoods.
- Include office support services, restaurants, and shopping in office districts; industrial zones should include restaurants and support services too.
- Design districts, regardless of location or predominant land use, which are pedestrian-friendly and transit-supportive.
- Evaluate churches and schools as potential mixed-use activity centers. These are already focal points within the community, and allowing use of their facilities during nighttime or on weekends can provide added amenities to the community without requiring additional land or infrastructure. Allowing localized housing on these sites should also be evaluated.

Practice 3-25: Provide usable and accessible parks and public spaces

The operative word here is *usable.* While an abundance of open space is desirable, a wide swath of unarticulated park can actually be a barrier. It's not just size, it's design and location—a small open space, placed and designed with care, can be well-used and well-loved. Well-designed public spaces should help to organize the district and provide amenities.



Usable, well-integrated public spaces—large and small—are critical to vibrant and sustainable districts.

Actions

- Design streets to be attractive comfortable places. Streets are the most abundant public space in the urban environment, accounting for nearly a quarter of the land area in many cities, and should be designed as if people—not just cars—matter.
- Design core open spaces to be small, urbane and carefully integrated into their surroundings.
- Design edge open spaces to provide a district greenbelt, recreation amenities, and pedestrian/bicycle links with other destinations.
- Avoid "dead zones," especially in denser urban areas, where people can look into public space but not go there.

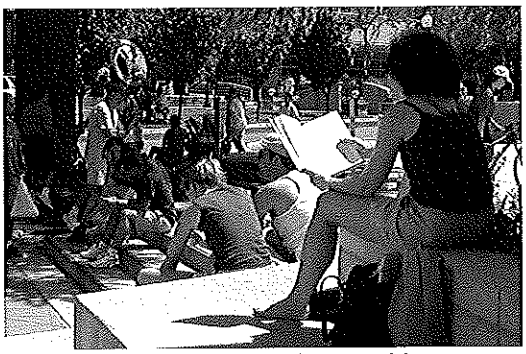
Practice 3-26 Cultivate small public spaces

Public spaces don't have to be large to be vital. Small public spaces—the space between buildings, the pocket parks, plazas, paseos and squares—interconnected by a coherent and attractive pedestrian network can help make cities and communities feel more alive, interesting and unique. They are places designed to welcome pedestrians to linger a while, sit, relax, watch or interact with others, and appreciate and contribute to the natural rhythms of city life. Small public spaces can enhance the street environment too, as they are discovered and enjoyed by people even if they choose not to linger before getting on their way.

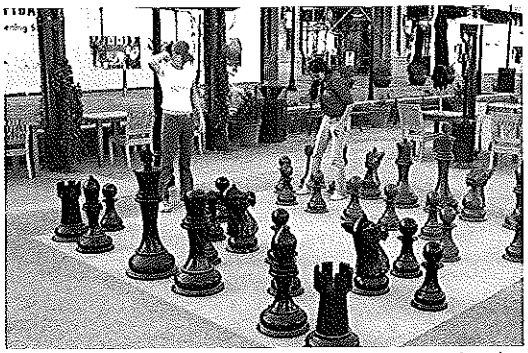
Opportunities for parks on the scale of San Francisco's Golden Gate Park in large urban cores are extremely rare. Most urban communities, in fact, are hard pressed to find areas sufficiently large for grassy playing fields or natural areas. Opportunities abound, on the other hand, for smaller public spaces. Many of these spaces can be found nestled between buildings and on street corners. These are often leftover spaces, the orphaned nooks and crannies of urban form that can result when developers and designers build piece-by-piece focusing only on their little bit of the world.

It's the small spaces that bind the urban fabric together. They are the spaces people routinely experience to get from place to place—as they walk from their office building to the parking garage or transit stop, or from their home to work. They may also represent the only common experience people have as they move through the urban environment. If poorly designed, the overall perception of the city can suffer greatly.

Small public spaces can do much to enrich the urban environment. They should not be static places though; there should be shade and sun, places to sit and lay things out, and accessible water features are always a hit.



Stairs can be wonderful gathering places too, if they are considered a component of urban design.



Spaces of all sizes should be designed to entice passers-by. This small space offers a large game of chess that does just that.

Conversely, when these spaces are thoughtfully designed and integrated they can enhance the urban experience manifold.

The following actions present some rules of thumb to consider when planning and designing for smaller public spaces:

Actions

- Consider the interaction of air, light, shade, and water with the design of space; *allowing contact with water features is especially important.*
- Provide places that encourage sitting and viewing. The most used seating spaces tend to be ones where people can arrange things for themselves or where the design offers opportunities for a variety of elevations and orientations that allow flexible responses to groups, weather, time-of-day, and seasons.
- Provide tables or places to lay things out. It's hard to have a friendly game of chess without a place for the chessboard.
- Make the space accessible and interactive. Avoid static places that people can look at but not touch, like raised planter beds with narrow walls.
- Consider aesthetic layout of steps in the design of buildings to expand their use beyond simple building access.
- Provide for food and allow entertainment—without food nearby most people won't linger for long. Food vendors, kiosks and nearby restaurants brings people, and people encourage other activities—even if it's just standing, watching or schmoozing.
- Invest in quality design and construction. In many cases the cost for developing these spaces will be high relative to grassy park-like open spaces—the pursuit of vibrant urban life is worth it.

I end, then, in praise of small spaces. The multiplier effect is tremendous. It is not just the number of people using them, but the larger number who pass by and enjoy them vicariously, or the even larger number who feel better about the city center for knowledge of them. For a city, such places are priceless, whatever the cost.

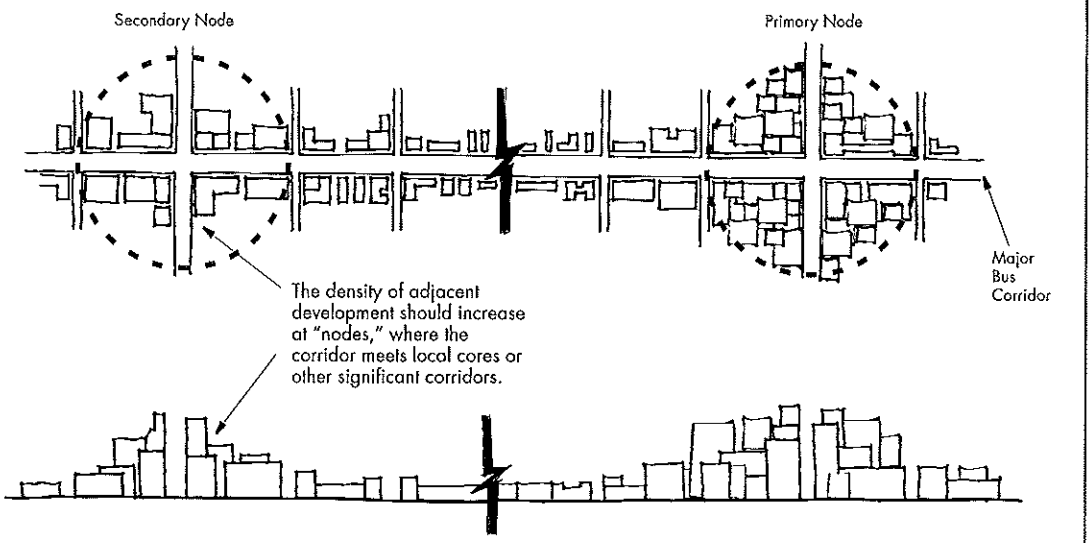
William H. Whyte
The Social Life
of Small Urban Spaces

Corridor

A corridor is a major road connecting many districts across the region, and in some conditions may be viewed as a "Linear District." While the functions, scale and character of each district may vary along the corridor, they all share a common element—the corridor itself.

Most of Santa Clara County's major arterial corridors are uninviting, no-frills environments, designed to move traffic and lined with auto-oriented uses set behind parking lots. Yet these corridors also give shape to built areas, connecting different cities, and intersecting local cores and downtown districts across the region. Corridors represent a tremendous reservoir of underutilized land where infill, reuse and redevelopment efforts can be focused. Multi-modal corridors, with highly developed pedestrian and bicycle facilities and high levels of transit service present unique opportunities for uniting districts and cores, place-making efforts, and increasing local and regional mobility.

Figure 3-4 Corridors Should Vary with Context and Opportunities



Recognizing this potential, VTA has targeted many of these corridors for significant transit improvements in the coming decades. The combination of available land and transit investment offers a remarkable opportunity to accommodate growth and increase transit ridership, thereby creating an important new typology in Santa Clara County: *the regional urban corridor.* Long-term transformation of these corridors will require significant public support, not only in the provision of transit but also in the allocation of funds for street retrofits to accommodate multi-modal travel, and changes in zoning codes and traffic policies.

The highest densities and levels of public amenity should occur at "nodes," where a corridor intersects with another corridor, or a local or regional core. These may be as minor as a small cluster of local retail and housing around an express bus stop, or as important as a major intermodal transfer facility in a central business district. At both ends of the spectrum and everywhere in between, these "nodes" are important points of access to the regional transportation system, and provide interesting and vital places for adjacent neighborhoods and employment areas.

The practices that follow focus on ways to develop urban corridors through planning efforts and targeted public investment toward a clearly articulated vision for growth. They also seek to direct density and diversity to appropriate areas while protecting the character of existing neighborhoods.

Practice 3-27: Transform arterials into multimodal boulevards

The wide rights-of-way (ROW) that characterize many major corridors can be reconfigured to support excellent surface transit, and a comfortable pedestrian environment while continuing to carry a large volume of auto traffic. In many cases, the street itself presents opportunities for design as a traditional boulevard with medians, side lanes, wide sidewalks, and parking zones.

Actions

- Design the street to accommodate a variety of modes including automobiles, transit, bikes, and pedestrians. There are a number of street sections appropriate for a multi-modal corridor depending on type and location. Chapter 4 illustrates various options.

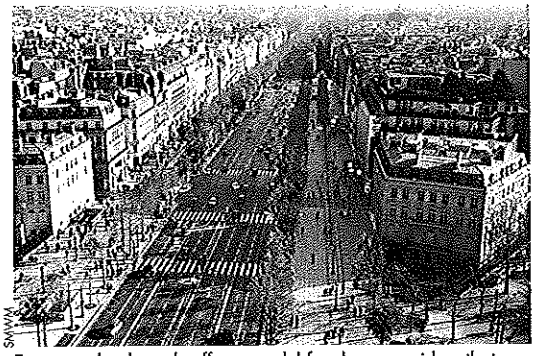
- Vary cross-sections along corridor length to support adjoining uses. In response to heavy pedestrian and transit use in busy core areas, traffic lane width may be reduced and sidewalks widened. Along other connecting segments, it may be appropriate to increase traffic lane width to assist the movement of traffic.
- In core areas, tame streets by using elements such as planted side medians, tree-planting, curb bulb-outs, and on-street parking. Design sidewalks to support a comfortable pedestrian environment.
- Provide transit-preferential signal and roadway improvements. Supportive infrastructure is required to provide fast and reliable transit service. Light rail and bus transit can be genuine alternatives to the automobile in corridors linking cities and districts having transit preferential treatments such as signal timing programs or bus-only lanes. See Appendices A and B on community planning for bus and rail transit.
- Mix land uses, especially at nodes, to establish identity and sense-of-place for the corridor.

Practice 3-28: Take advantage of corridors' width and scale

Many infill sites are limited in their development potential because surrounding neighborhoods have an established scale and feel. Major arterials, which are generally large-scale and utilitarian, do not present that issue. The scale and width of major corridors and boulevards presents an opportunity to build at higher intensities than is typically possible in other parts of the county. Major corridors will not be overwhelmed by larger structures; in fact, larger buildings help create place by giving form and character to the street.

Actions

- Increase residential and commercial densities along corridors to increase transit use and maximize investment in existing infrastructure. In doing so, governments should take steps to mitigate spillover traffic affects on surrounding neighborhoods. For example, a corridor can accommodate higher density development along its length, but this density might be limited to a narrow zone on either side. In core areas this might be 2 to 3 blocks; in residential areas a block or single parcel depth may be sufficient. Focus activity and density in this zone and make connections with adjoining districts.

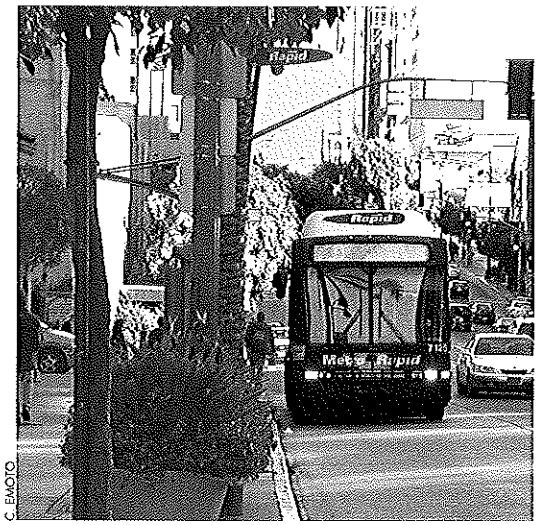


European boulevards offer a model for dense corridors that efficiently move both traffic and transit, while serving pedestrians generously.

- Increase building heights and reduce building setbacks to help establish a street wall and enhance the pedestrian environment. This helps to define the street and create a more attractive human-scaled environment.
- Mix land uses along the corridor—both at the site level and street level. Blocks in between major nodes may have residences above and amenity-oriented retail below while blocks at or near major nodes may have offices above and more intense commercial/retail uses below—such as large restaurants, clubs, movie theatres, or major retail shops. Mixing may also occur horizontally, for example a supermarket placed adjacent to a high-density residential complex.

Practice 3-29: Build to the corridor, not away from it

Most communities are built away from corridors, which are usually perceived as dirty, loud, and unattractive—regardless if they deserve those labels or not. Typically, the intensity and scale of development is lowest immediately adjacent to the road right-of-way, with wide swaths of land



C. EMOTO

Bus Rapid Transit like Los Angeles' Metro Rapid system offers a new model of flexibility, efficiency, and convenience that can be applied in Santa Clara County.

left empty or used as parking to create buffer zones between traffic and adjacent uses. Attempts to take advantage of vacant land and transportation resources along corridors are often thwarted by their projected traffic impacts. In an effort to maintain high levels of traffic service, development is often pushed away from transportation corridors, toward undeveloped areas with little transportation infrastructure. These practices have led to widespread under-utilization of urban land and infrastructure.

Actions

- Identify available vacant and infill sites along corridors and attract development to them. Consider public or public-private catalyst projects that embody development goals for the corridor.
- Reclaim underutilized land for higher density housing and offices built out to the street. In this way, communities can gradually build toward corridors, which become spines of higher density and greater activity.
- Tame corridors with trees and pedestrian amenities.
- Develop alternative LOS policies that facilitate infill development along corridors. For more information on LOS policy and infill development, see Chapter 7, Section 2.
- Establish street and architectural design guidelines for the corridor. Major corridors are not inherently unattractive. They can be made aesthetically pleasing through good planning and design practices, and incremental implementation.

Practice 3-30: Vary corridor treatment with context

As corridors flow through a region they encounter a range of conditions, from agricultural land to residential neighborhoods, to major metropolitan downtowns.

The appropriate intensity of land use and urban design elements will vary with the context of those conditions, and must be established with the participation of local stakeholders. Development should also be of generally higher density along major corridors than in surrounding areas. This can capture the added value of improved transit services, take advantage of underutilized land, and even help insulate adjacent districts from the negative effects of high traffic volumes.

Actions

- Engage in corridor planning processes with adjacent municipalities, VTA, and other relevant agencies. Identify appropriate locations for nodes of higher density development, especially around transit facilities and existing cores.
- Consider transit-oriented residential development on corridor segments between the commercial nodes, and mixed-use developments at nodes.
- Step the scale of development down away from the corridor, especially when establishing a transition into adjacent residential districts.

At corridor "nodes," public investment in human-scale detail and streetscape amenities is essential for making places for people—and dogs!

Practice 3-31: Reinforce corridor identity by providing a public framework for corridors and "nodes"

Corridor identity should be reinforced by investments in the public realm and by clear guidelines for project developers building within it.

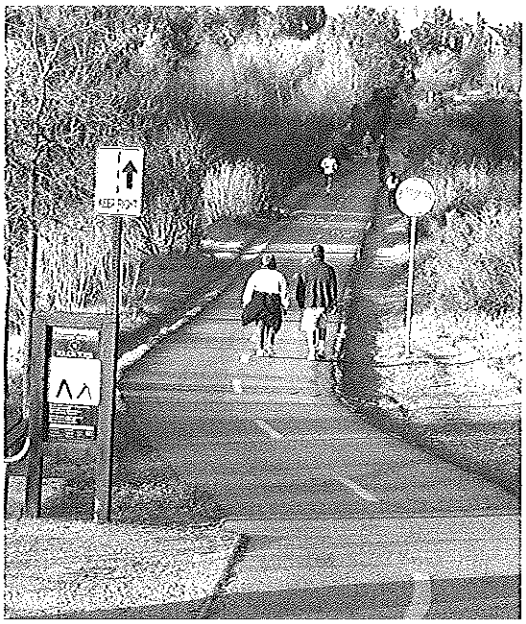
Actions

- Define a street design vision that can be applied corridor-wide in context with adjacent land-uses. This corridor vision should be based on a thorough public involvement process and applied through policy mechanisms such as design guidelines, general plans, zoning, and specific plans.
- Attract catalyst projects that generate the character envisioned for the various segments of the corridor. A single catalyst project can attract similar or complementary uses to the area. In doing so, local governments should consider pursuing public-private partnerships to ensure high-quality development and design.
- Invest in public amenities that create vibrant environments for people. These include pedestrian and bike networks, streetscape improvements, open space and recreation areas, public art, and destination uses such as museums, libraries, civic buildings, and parks.
- Plan and design a mix of corridor land uses to offer community amenities that compliment adjacent residential neighborhoods. As corridor land uses become neighborhood destinations conveniently reachable by foot or bike, the corridor itself adds richness to the area and becomes assimilated as an active part of the neighborhood.

Practice 3-32: Consider linear parks

Transportation corridors and natural geographical features, such a streams and rivers, offer unique opportunities for developing linear parks. These features present possibilities for both aesthetic and connectivity enhancements for surrounding communities. With imaginative planning and design, linear parks can provide usable neighborhood open space, reduce the amount of

While it is important to build up to corridors, it is equally important to respect the character of adjacent neighborhoods.



Linear parks offer potential for connectivity, beautification, and recreation. Shown here is the Los Gatos Creek Park, nestled between Highway 17 and Los Gatos Creek.

impervious surface area, and create community corridors with unique character and improved walk and bike access to city and regional destinations.

Actions

- Identify existing and potential linear park corridors in general plans and other large-scale planning documents.
- Design multipurpose facilities that support both pedestrians and bicyclists. Corridors can be narrow and have varied terrain. Inventive multi-purpose designs can yield complementary benefits including extensive landscaping and visual buffers where needed, gap closures and improved network connectivity, enhanced community identity and unity, and habitat preservation or restoration.
- Include amenities where appropriate such as benches, fountains, kiosks, trash cans, play areas, and public art to transform these spaces into usable community places.
- Use excess land adjacent to transit and roadway rights-of-way, and under elevated structures. Unused space beneath elevated transit lines and roadways can be perceived as dead space, creating physical and psychological barriers. Establishing connections, activities and visual interest in areas uses transportation resources more efficiently, and softens the impact of their presence within the community.
- Consider ways to facilitate the assembly of land along corridors. This includes intra- and inter-agency partnerships, and fostering a favorable climate where businesses and property owners can work together to resolve issues and develop projects that enhance the community.

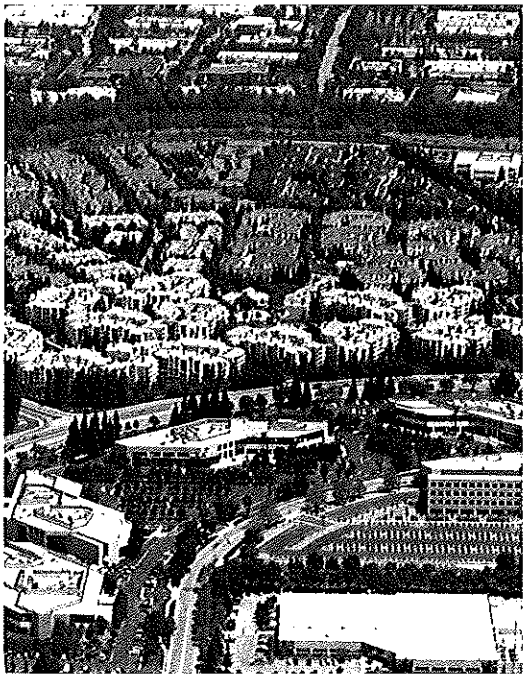
Region

Many of the issues addressed in this manual are regional in scale. Uncoordinated development, jobs/housing imbalance, traffic congestion, high housing costs, loss of open space, inefficient transportation networks, and pollution are regional phenomenon— and are often worsened by uncoordinated local decisions. Yet effective planning at a regional level remains a perennial challenge.

Local jurisdictions are apprehensive about giving up even small amounts of local control, and regional entities have been known to be unresponsive to local needs and prescriptive in implementing policies. Moreover, what is fiscally or otherwise desirable at the local level is often at odds with the collective needs of the region. As a result of these dynamics, local jurisdictions and regional entities often clash as each pursues policies that support their particular goals—and most often these clashes happen because there is not a regional framework for discussion and policy-making.

As a countywide agency involved in providing regional transportation services, VTA is positioned to influence coordinated regional decision-making through its apportionment of transportation funds, and to help establish a framework—or common ground—for managing regional growth through its CDT Program.

However, VTA has no control over land use, and can accomplish little without the support of local jurisdictions. This manual is intended to establish a vision for the integration of transportation and land use across the region, and link local decisions more effectively to the long-term efficiency, livability, and prosperity of Santa Clara County.



Visioning, planning, and cooperation should occur at the regional level, where the impacts of development decisions are far-reaching.

Practice 3-33: Avoid piecemeal "cookie-cutter" smart growth solutions—consider lessons of history, environment and local resources

Santa Clara County has a rich character shaped by its unique combination of natural resources, historic areas, and environmental constraints. In most cases these do not fit within specific jurisdictional boundaries. However, their role in establishing a vision for the county as a whole is critical for ensuring that growth does not wipe out its special character. All cities should discuss and agree upon a common regional vision as a backdrop to local planning and application of best practices and smart growth solutions.

Practice 3-34: Match densities to transportation resources

Citywide and regional plans should accommodate and plan for increased densities in areas of increased transportation resources. VTA's 2020 Plan identifies corridors and projects targeted for transportation and transit investment over the next thirty-six years.

Full benefit of these investments can only be realized when cities build upon them by directing appropriate uses and densities near these resources.

Practice 3-35: Develop a regional approach to planning for corridors

Santa Clara County has a number of corridors that pass through multiple jurisdictions. While segments and adjacent land uses are generally designed and built separately, it is important to have a long-range vision for corridors as a whole—which requires cooperation and collaboration among multiple jurisdictions. It may also involve developing a regional solution for LOS impacts caused by new, infill, and redevelopment projects.

Practice 3-36: Infill before developing outlying areas

Many apparently built-up areas in Santa Clara County contain opportunities for infill development. Most major corridors are also lined with a great deal of underutilized or vacant land. All jurisdictions in the County should allocate resources to identify available land for infill in central areas and attract development to those sites before approving projects at the edges.

Practice 3-37: Achieve better jobs/housing balance

Addressing the balance between jobs and housing must be undertaken at a regional scale. Resources such as freeways, streets, and major transit lines are common to the region and establish a logical framework for growth. The

I believe that cities ought to be magnificent, beautiful places to live. They should be places where people can be fulfilled, where they can be what they can be, where there are freedom, love, ideas, excitement, quiet, and joy. Cities ought to be the ultimate manifestation of society's achievements. City planning, to me, is the art of helping cities to become and stay that way.

Alan B. Jacobs
Former Planning Director
of the City of San Francisco
(1966–1974)

location of housing, office and industry is dependent on these resources and is best planned for at the regional level. This suggests that major land use decisions be made by cities in partnership with neighboring cities, and in cooperation with VTA and the County. Again, this method involves resolving traditional obstacles to regional planning, and developing creative new strategies to encourage regional cooperation and possibly resource sharing. More about regional cooperation can be found in Chapter 7.

In the creation of any permanent work of art, the process of dissipation and consumption are stayed: hence the only civilized criterion of a community's economic life in not the amount of things produced, but the durability of the things created.

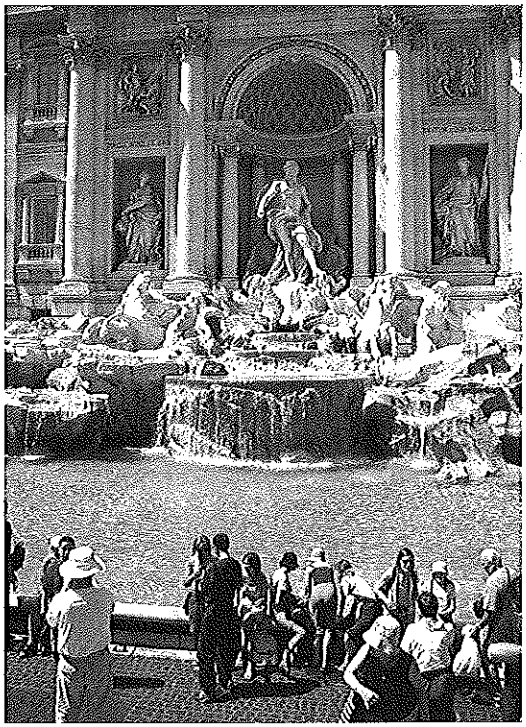
Lewis Mumford,
Sticks and Stones

Practice 3-38: Coordinate general planning efforts

In the absence of a regional governing structure that can make growth management policy, voluntary cooperation among jurisdictions is essential for effectively managing regional growth. While jurisdictions plan internally, many of the affects of that planning are external and impact neighboring jurisdictions. Local jurisdictions face practical and legal constraints in attempting to deal with regional issues such as housing supply, the location of jobs, traffic congestion and environmental pollution. Localized general planning efforts can be greatly enhanced by simply fostering an increased awareness of the issues, concerns and constraints of neighboring jurisdictions, and working in partnership with them through cooperative "Local Area" planning councils and commissions.

Practice 3-39: Plan and design civic projects that last and inspire

Although this practice is presented in the "Region" section of this chapter, since its benefits are designed for enjoyment by the widest range of people, it has applicability within the other "building block" levels too.



Completed in 1751, the Trevi Fountain is placed at the end of the Vergine aqueduct. Built in 19 B.C., the Vergine is one of Rome's oldest, still functioning, aqueducts.

Whether a building, plaza, park or public art, civic projects should be planned and designed for the long-run. They should inspire the imagination and stir the blood. They should reflect pride in our culture and society, and provide a lasting legacy —and not just for our generation or the next, but for generations to come. The aesthetics, the architectural and urban design styles, should say something about how we lived and what we valued. Rome's Trevi Fountain (shown above) is a case in point. Centuries after it was built, it continues to the attract attention and appreciation of residents and visitors, and fire the imagination of young and old alike.

chapter 5

MODEL PLACES

The best practices for urban design and streets presented in the previous chapters set a course for building better urban communities. The intention is that member agencies will use them to form more compact, walkable, lasting, transit-friendly places. It is also intended that member agencies will add detail and adapt them for application in their own communities.

This chapter includes two distinct sections to show how it can be done: *Model Places* and *Visualizing Best Practices.* The first section illustrates how specific public and private improvements to typical places throughout the county can transform them from their existing conditions to more multimodal, and ultimately, more livable places. The second section builds on the notion that sometimes a picture is indeed worth a thousand words. To help illustrate what implementing best practices can look like in Santa Clara County, the *Visualizing Best Practices* section of this chapter depicts how the look and feel of places can improve as best practices are implemented over time.

MODEL PLACES

The best practices identified in Chapters 3 and 4 cover a wide range of urban and street design topics that can be applied in diverse settings. Of course, one size does not fit all, and it is not practical to suggest application of all these practices to so many different areas. Rather, it is expected that cities and jurisdictions will use the range of best practices as a matter of policy in their planning and development projects, whether private or public. A number of strategies for implementation are provided in Chapters 6 and 7.

Best practices are easily applied in new developments if they are adopted early in the process. Public projects such as schools and libraries offer excellent opportunities for catalyst projects, and for cities to lead by example. Cities are also well served if they identify private developers who have built model developments in other areas and encourage them to propose best practices projects here in Santa Clara County.

Best practices are equally important in the retrofit of existing development, streets, sites, districts, and public spaces. Much of the county consists of mature areas, and most projects will need to be designed to respect the context of their surroundings. In such instances, development and design guidelines may have to be modified or created before best practices can be fully applied.

Identifying the right best practices for a specific project relies upon careful analysis of existing conditions. To illustrate the process, *Model Places* discusses a set of typical areas in the county. The examples range from neighborhood cores to major regional corridors. A set of current conditions is defined for each model place and the problems they pose are annotated on the illustration. This is followed by proposals for applying best practices to transform the area.

The areas discussed here are generic examples of which variations may be found in communities throughout Santa Clara County. They are:

1. Regional Corridor (pp. 5-4, 5-5)
A length of a street corridor such as El Camino Real with varied but unassociated land uses along its length; characterized by excessive width, vacant sites, low-density buildings with large building setbacks, little attention to pedestrian character, lacking a sense-of-place or identity.

2. Neighborhood Core (pp. 5-6, 5-7)
A medium-sized intersection with a strip mall that serves the adjacent community; characterized by low-density buildings, excessive parking, and nondescript streetscapes.

3. District Core (pp. 5-8, 5-9)
A major intersection with large office campuses centered on transit; some surrounding residential but no connection to work areas; design of office complexes is very suburban, with little in the way of sidewalks or public areas.

4. Corridor Residential (pp. 5-10, 5-11)
Inward facing residential complex along a busy corridor; transit is present but inhospitable connections discourage its use except by those who have no alternative; inefficient use of land with unusable cosmetic buffer zones.

5. Residential Subdivision (pp. 5-12, 5-13)
Subdivision with lots accessed by cul-de-sacs and loop roads; auto-oriented, typically with few or no connections with adjacent properties.

6. Office Park (pp. 5-14, 5-15)
Office campus on a site near a natural waterway and along transit lines; design does not relate to context; uses the typical model of separate buildings set in a sea of parking.

7. Retail Center (pp. 5-16, 5-17)
Destination retail center in a small town and along a major traffic arterial; characterized by blank walls, large expanses of parking, no connection to residential areas behind it, and lacking pedestrian character and scale.

8. Urban Big Box Retail (pp. 5-18, 5-19)
Big volume store such as Walgreen's or Target in a main urban street; typical model of an opaque box set back behind a sea of surface parking is used.

9. Neighborhood School (pp. 5-20, 5-21)
School in a residential neighborhood with few pedestrian connections for students walking; the campus has facilities and excess land but no program that keeps it active after school hours.

The best practice scenarios for each of these places apply a set of guidelines from those discussed in the preceding chapters. Some examples show a transformation that represents an alternative approach to current design practices; for example, the proposed new design model for the urban big box retail, the retail center, and the neighborhood school. Other examples show how sites may be retrofitted with infill or re-assembly of land, keeping some of the existing buildings in place; for example, the regional corridor and the district core. In all cases, the following transformations are meant to show how best practices can be combined and build upon themselves to enhance and create

"place." The illustrations also direct the reader to other sections of the manual where more detail on specific topics may be found.

While the opportunities and benefits for applying best practices are many, VTA also recognizes the constraints to applying them in Santa Clara County. In many cases, it may not be possible to apply all of the recommendations due to constraints in funding, availability of land, community acceptance, policy issues, or timing of projects. To address this reality, VTA promotes an incremental approach, where selected practices are applied systematically to achieve small improvements that will yield abundant benefits over time. For example, it may not be possible to retrofit a traffic arterial into a multi-modal street immediately. It may be possible, however, to add a bike lane, provide crosswalks, and plant trees along the sidewalk. Over time, patient and creative application of best practices will create the kind of livable communities envisioned in this manual, and that people want and deserve.

It is clear that the form of a city or of a metropolis will not exhibit some gigantic, stratified order. It will be a complicated pattern, continuous and whole, yet intricate and mobile. It must be plastic to the perceptual habits of thousands of citizens, open-ended to change of function and meaning, receptive to the formation of new imagery. It must invite its viewers to explore the world.

Kevin Lynch, The Image of the City

Figure 5-1 TYPICAL REGIONAL CORRIDOR: Existing Conditions

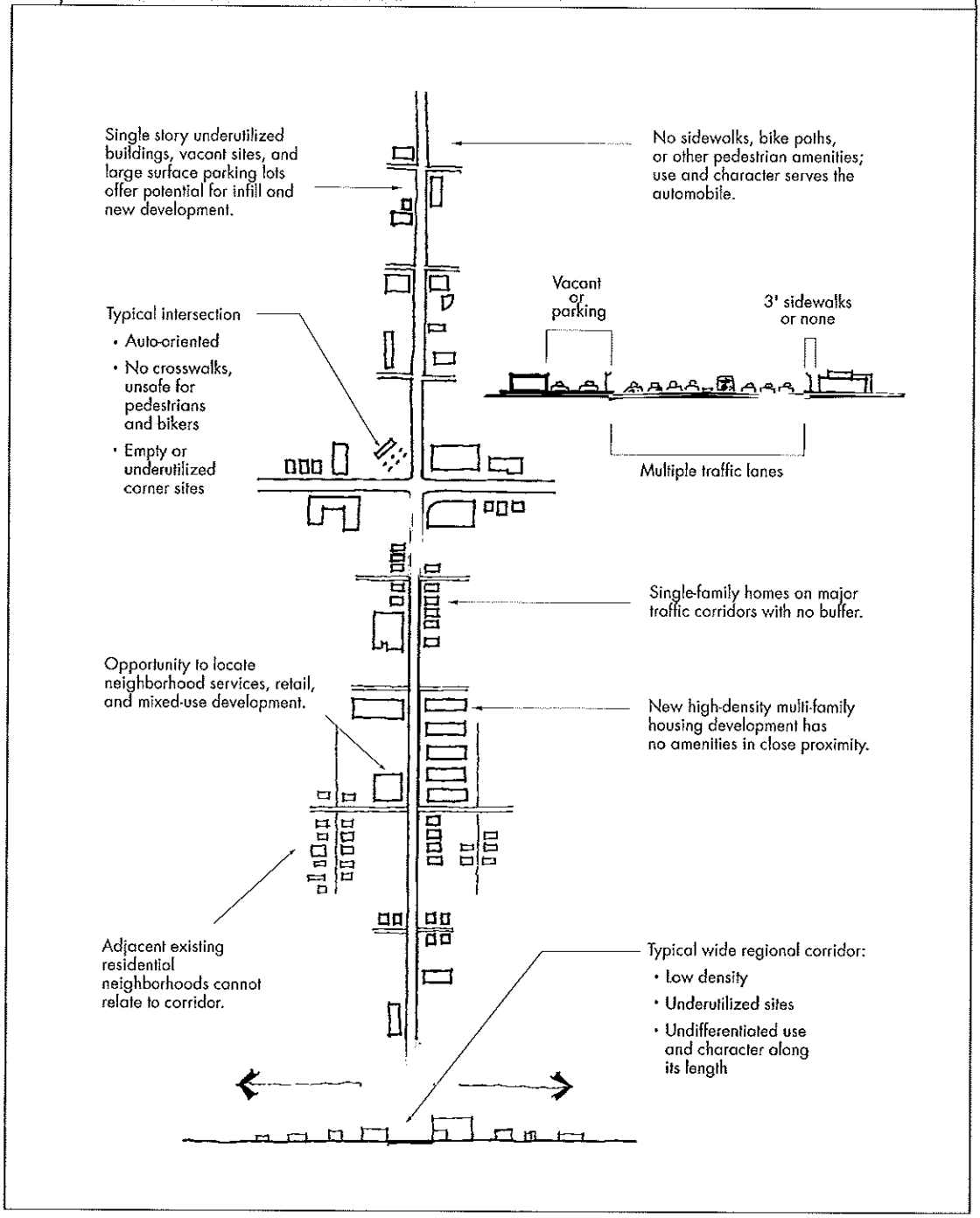
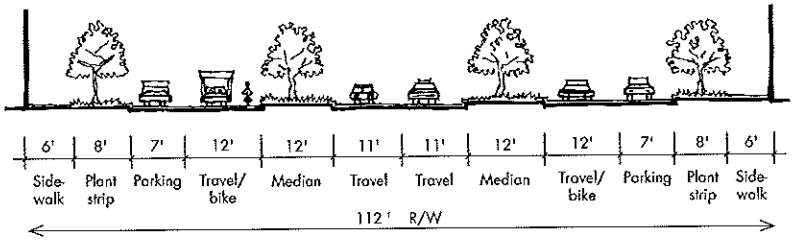
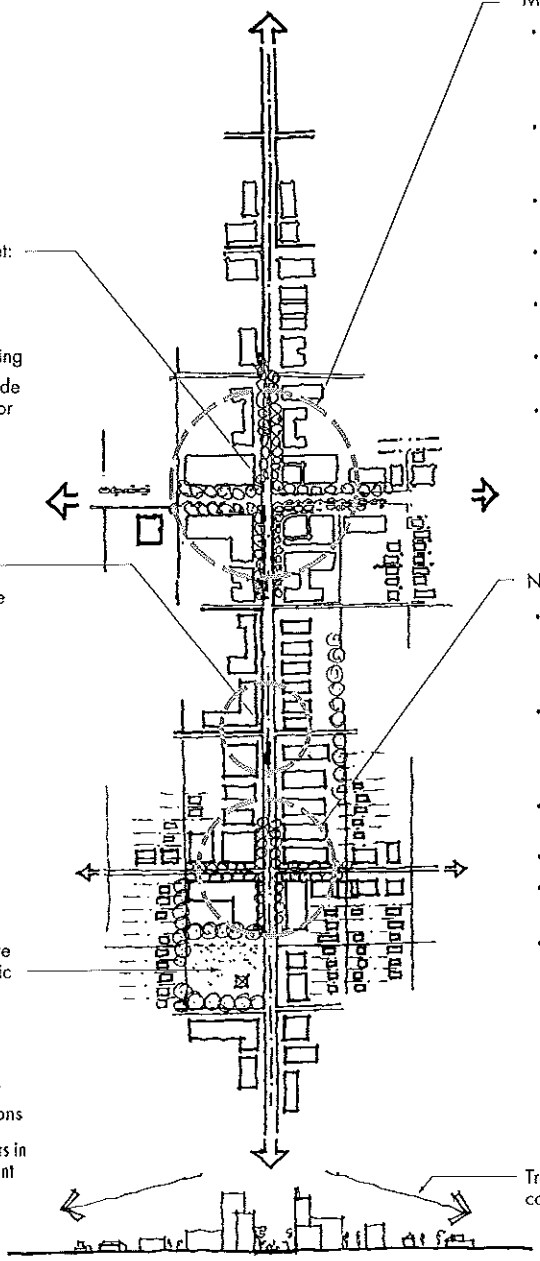


Figure 5-2 TYPICAL REGIONAL CORRIDOR: Best Practice



Typical Multimodal Street: Boulevard



Typical multi-modal street:

- Width relates to adjacent use
- Accommodates bike paths and street parking
- Sidewalks are 15' wide and have amenities for pedestrians

Nodes:

- Build to corners of the intersection
- Have a mix of uses
- Provide pedestrian crossings

Corridors with transit are good locations for public amenities such as:

- Open space and recreation
- Libraries and schools
- Community destinations

• See section on Corridors in Design and Development Practices, chapter 3

Major mixed-use core:

- Locate high-density uses such as office, retail, entertainment, and residential
- Reserve ground floor for retail, restaurants, and other public use
- Provide on-street parking and shared garages
- Ensure convenient access by all modes
- Design good connections to and from transit
- Focus on pedestrian amenities and safety
- Have minimum setbacks

• See Implementation chapter 7 for discussion on alternate Level of Service standards for multi-modal intersections

Neighborhood core:

- Locate uses such as retail,neighborhood services,restaurants, small office, etc.
- Provide a range of housing types including higher-density multi-family buildings
- Provide on-street parking and rear lots
- Have minimum setbacks
- Provide wide sidewalks and corner bulb-outs
- Buffer from nearby low-density residential uses.

• See separate illustrations for District Core and Neighborhood Core

Transition of density from corridor to adjacent blocks

Figure 5-3 NEIGHBORHOOD CORE: Existing Conditions

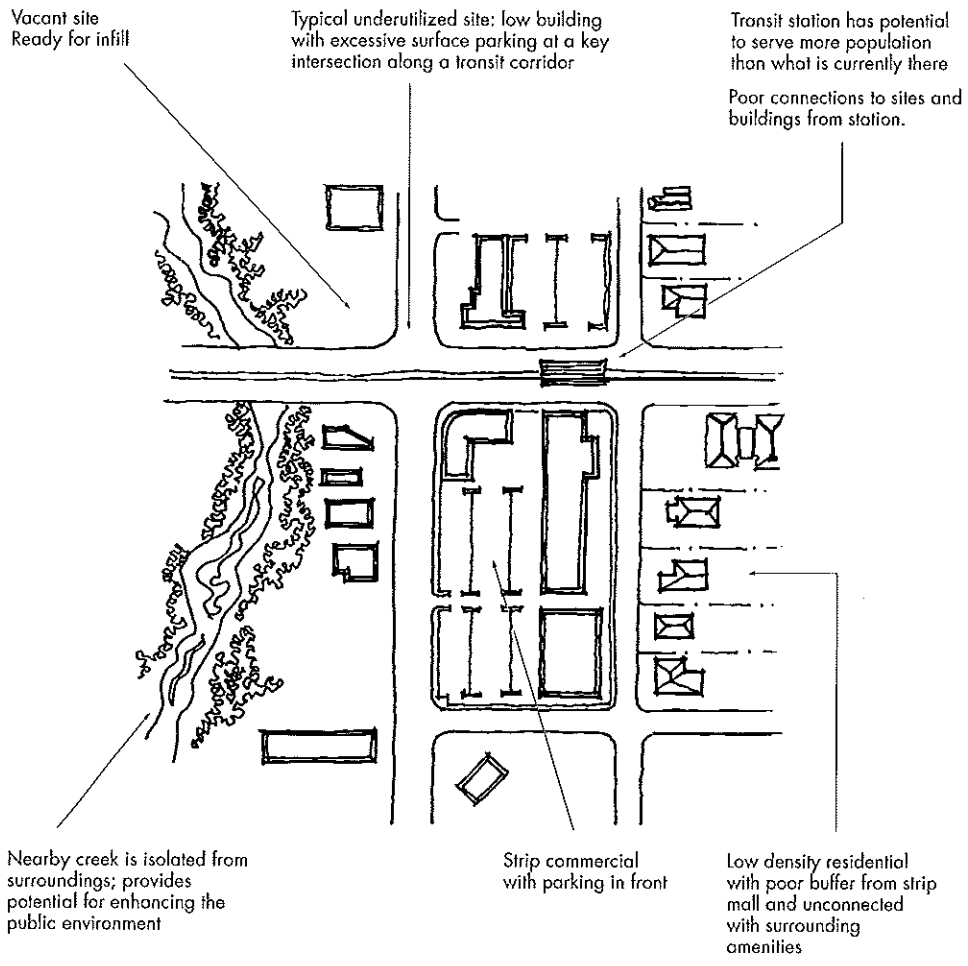
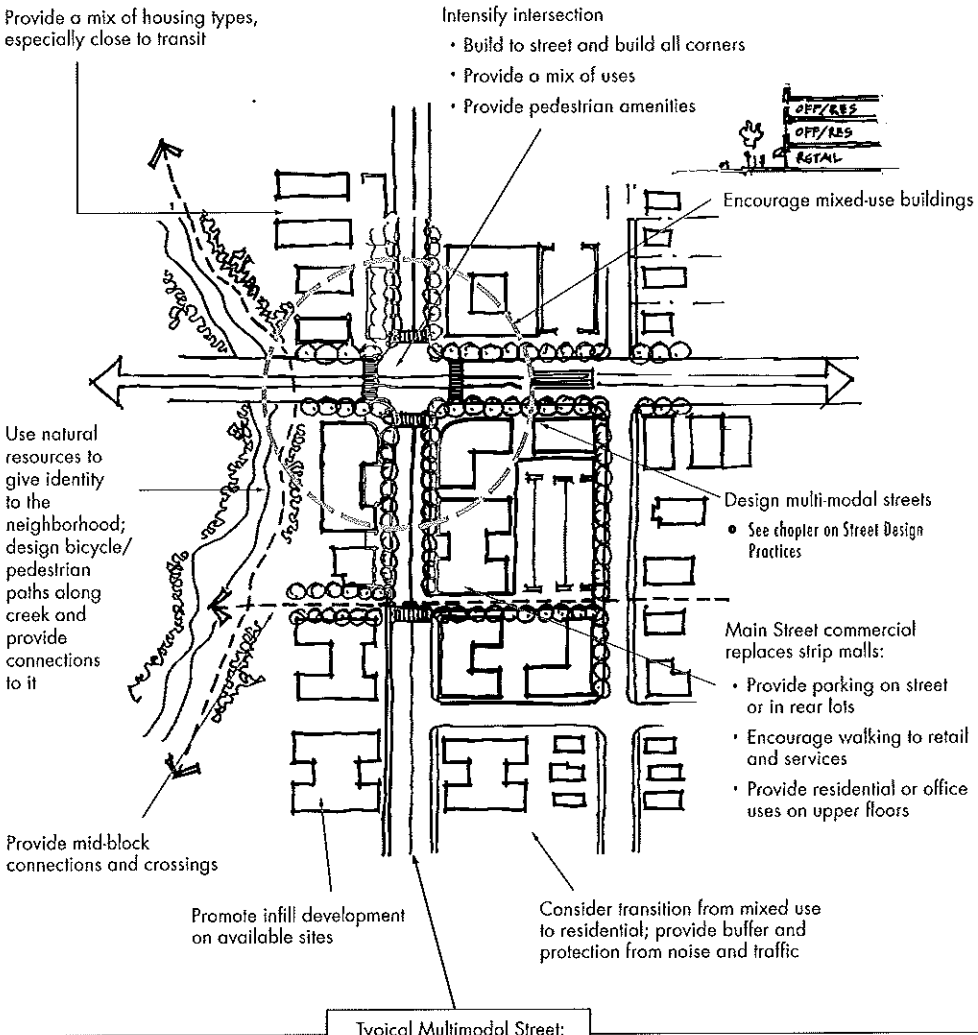


Figure 5-4 NEIGHBORHOOD CORE: Best Practice



Typical Multimodal Street: Main Street

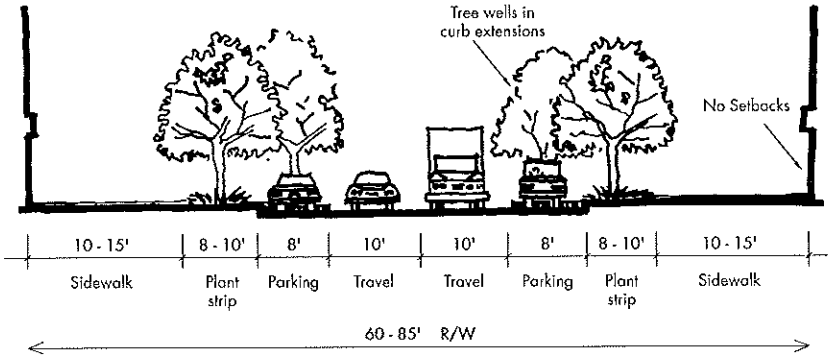


Figure 5-5 DISTRICT CORE: Existing Conditions

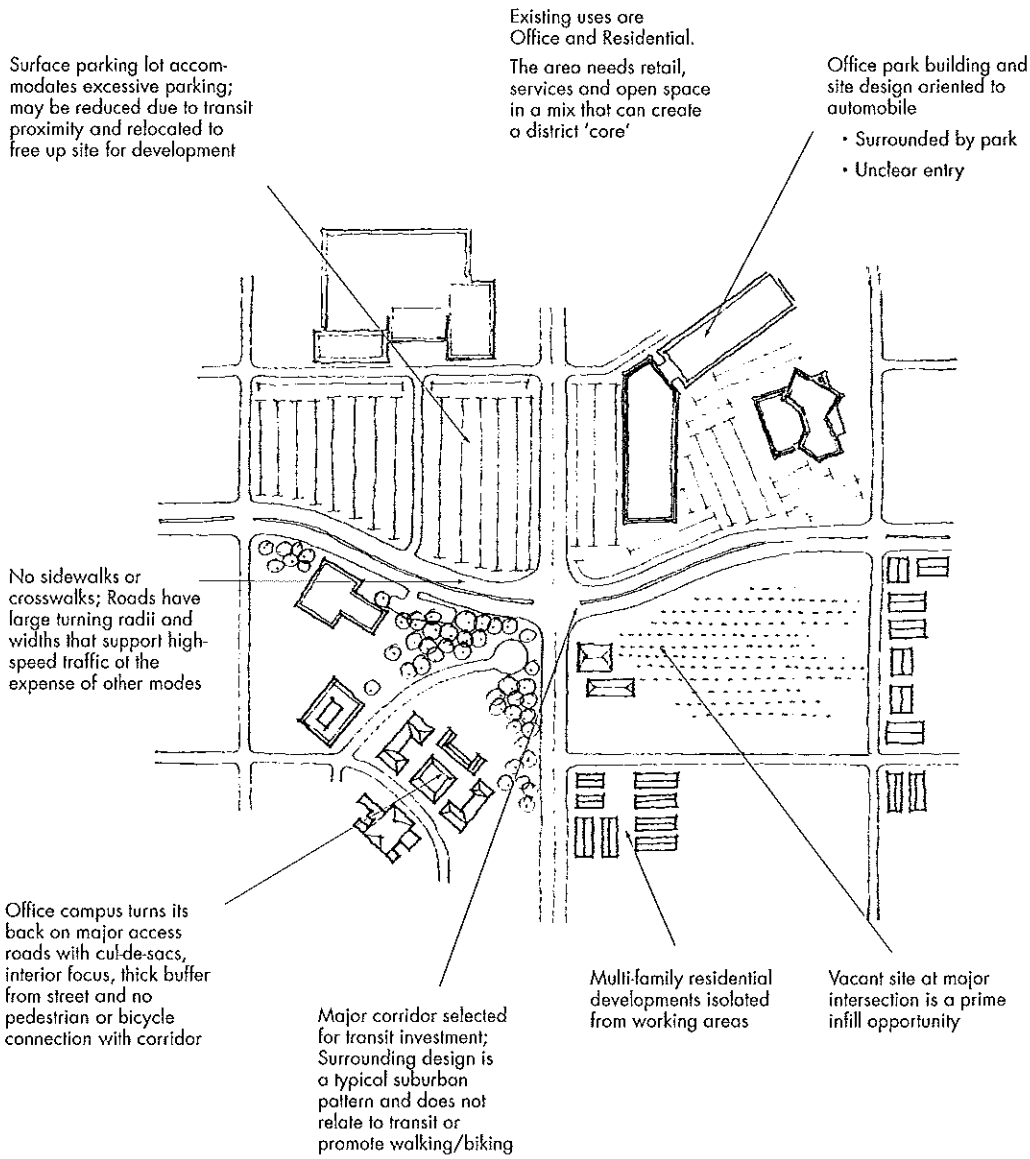


Figure 5-6 DISTRICT CORE: Best Practice

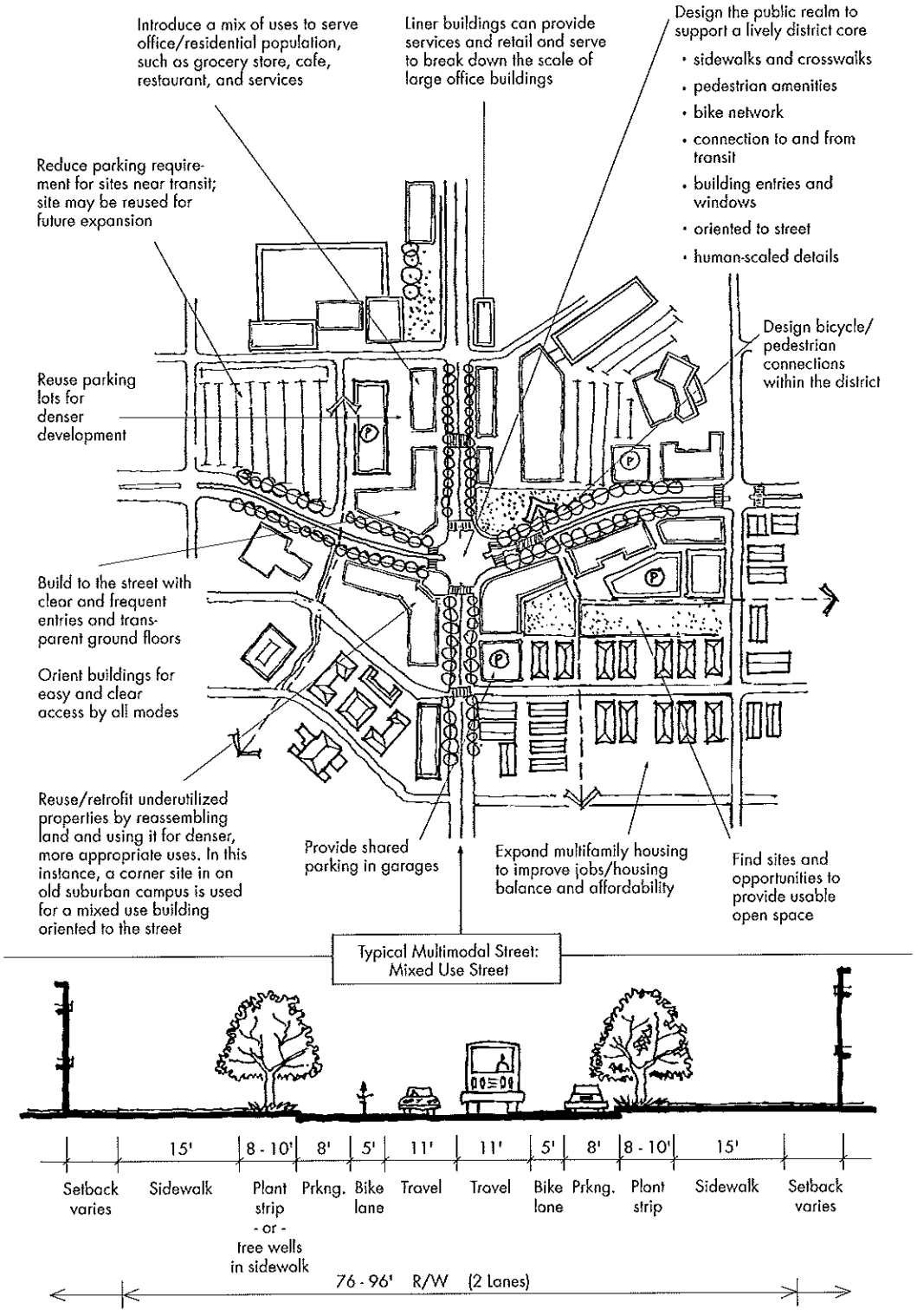


Figure 5-7 CORRIDOR RESIDENTIAL: Existing Conditions

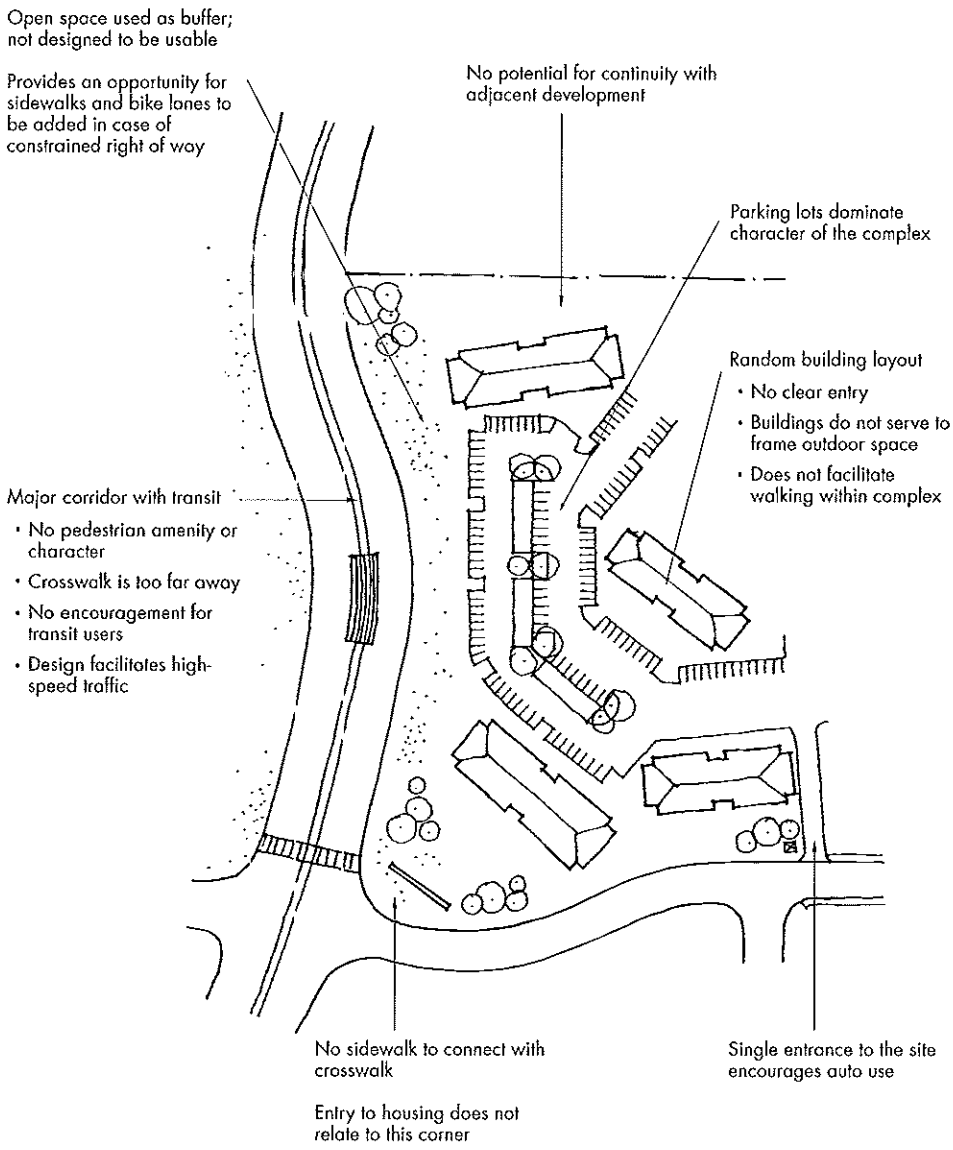


Figure 5-8 CORRIDOR RESIDENTIAL: Best Practice

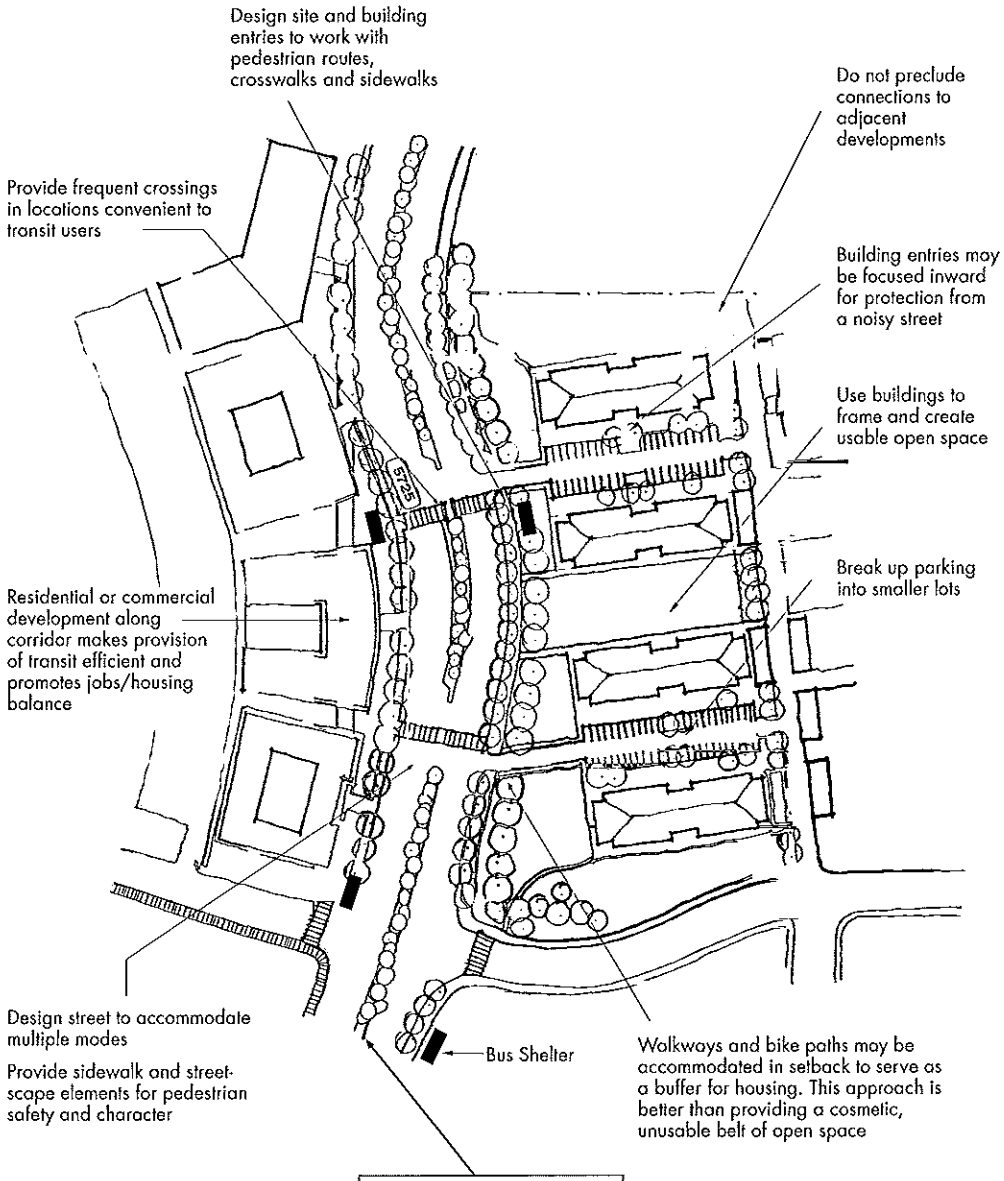


Figure 5-9 TYPICAL SUBDIVISION: Existing Conditions

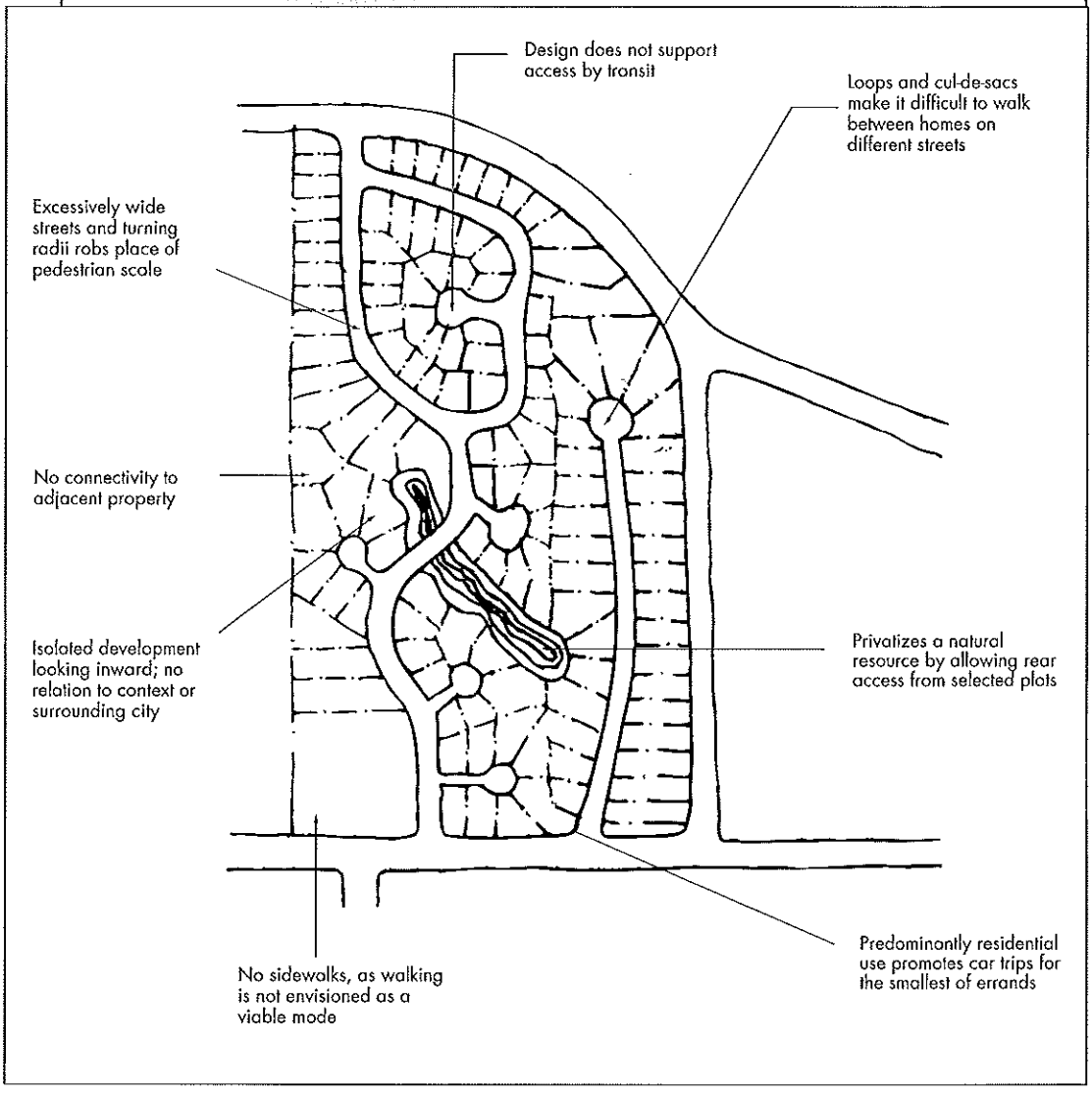


Figure 5-10 TYPICAL SUBDIVISION: Best Practice

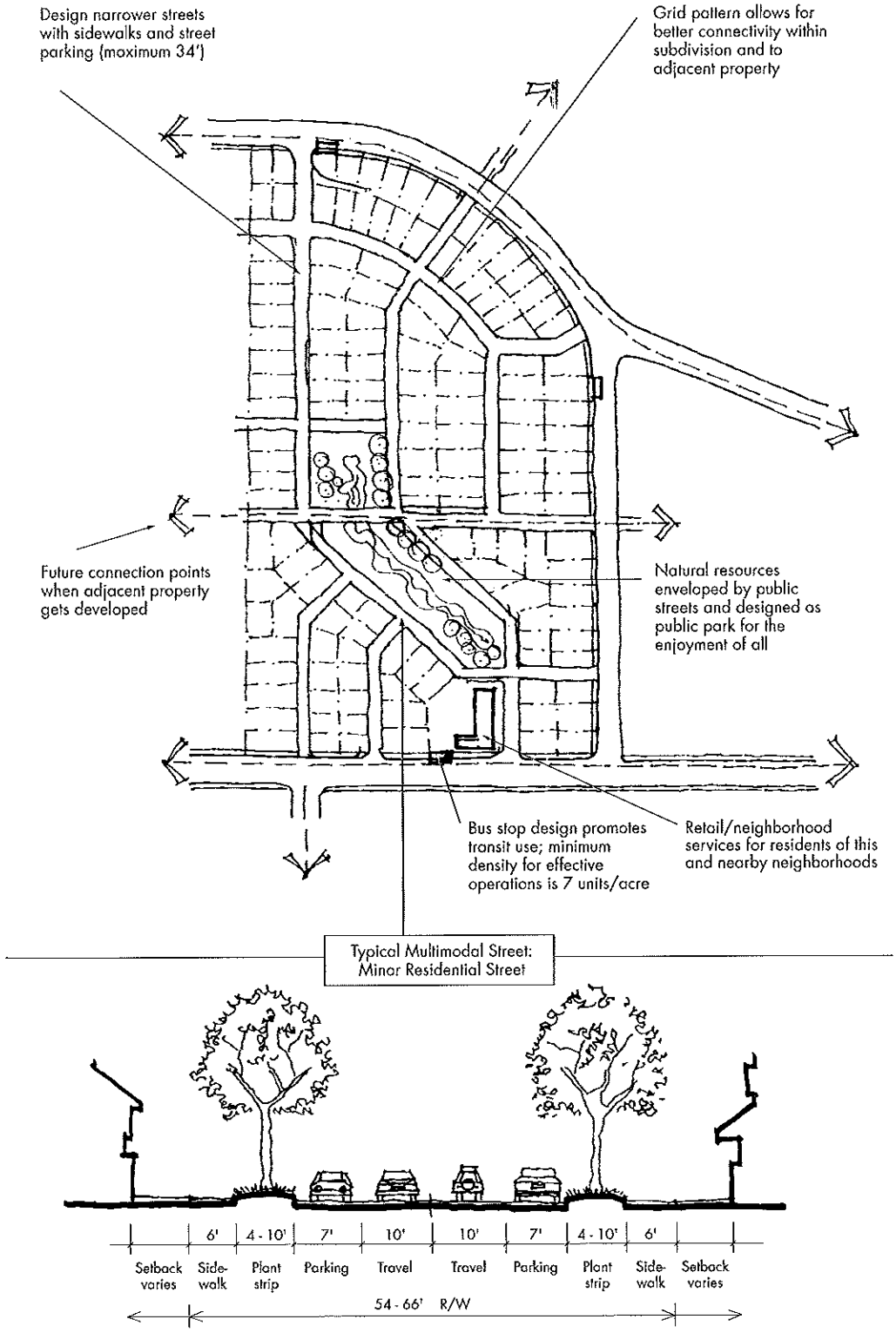


Figure 5-11 OFFICE PARK: Existing Conditions

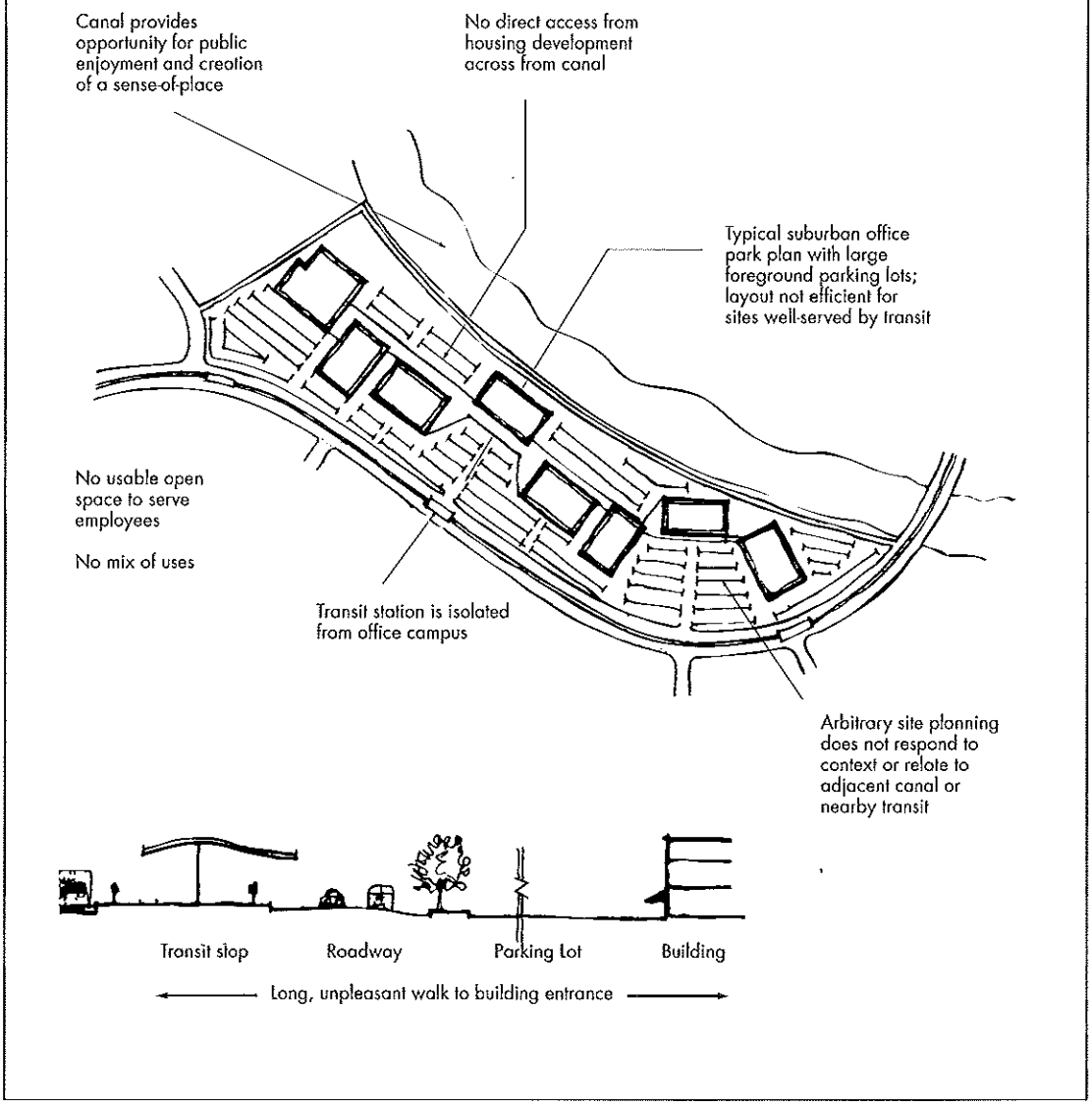
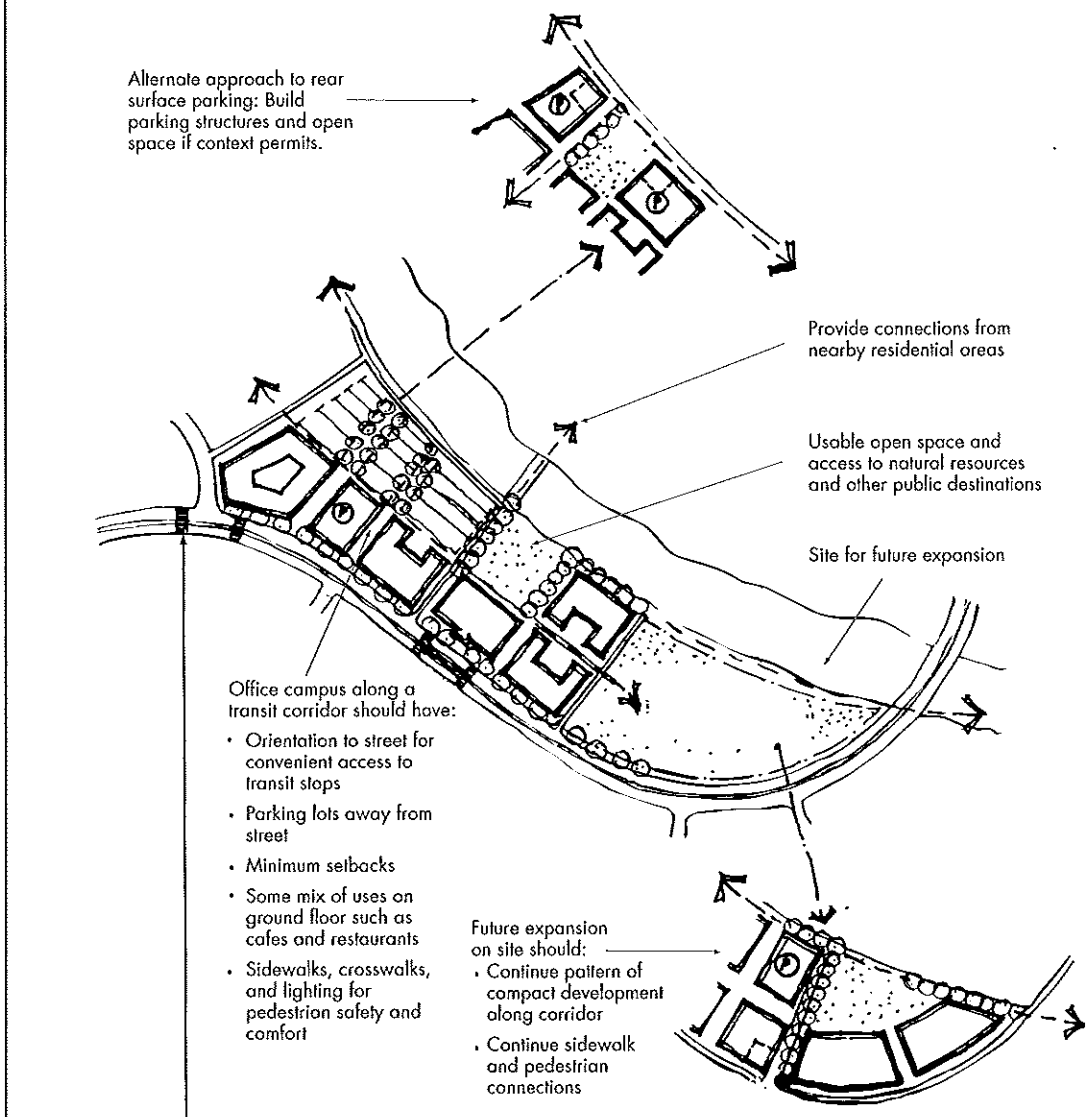


Figure 5-12 OFFICE PARK: Best Practice



Typical Multimodal Street: R&D/ Office Park Street

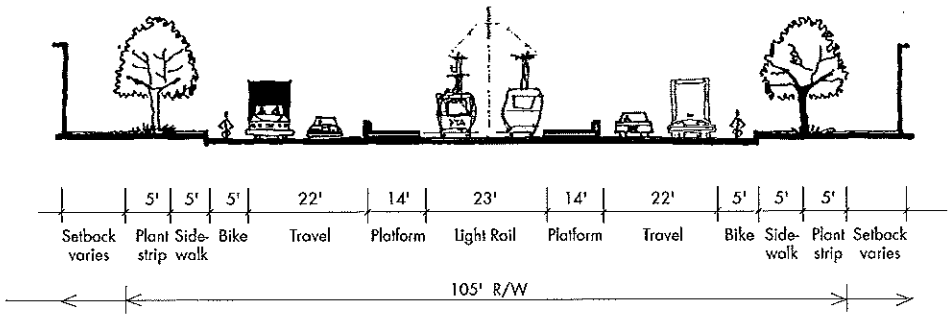


Figure 5-13 RETAIL CENTER: Existing Conditions

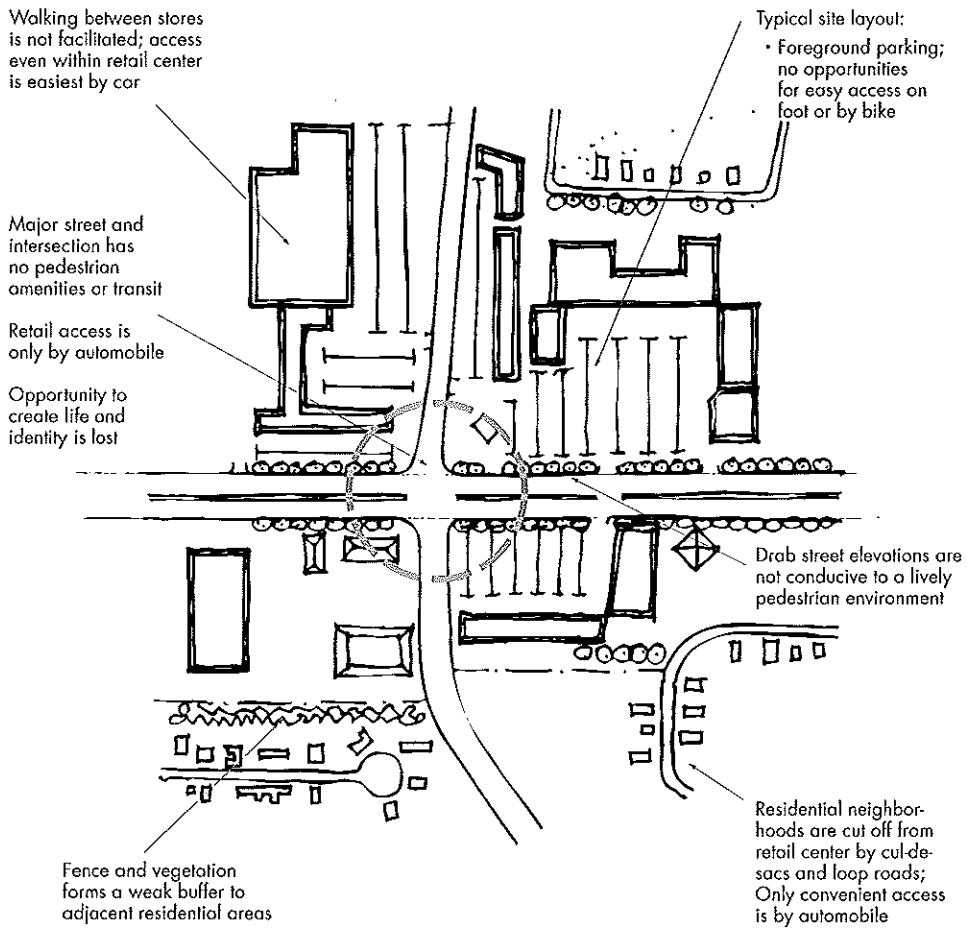
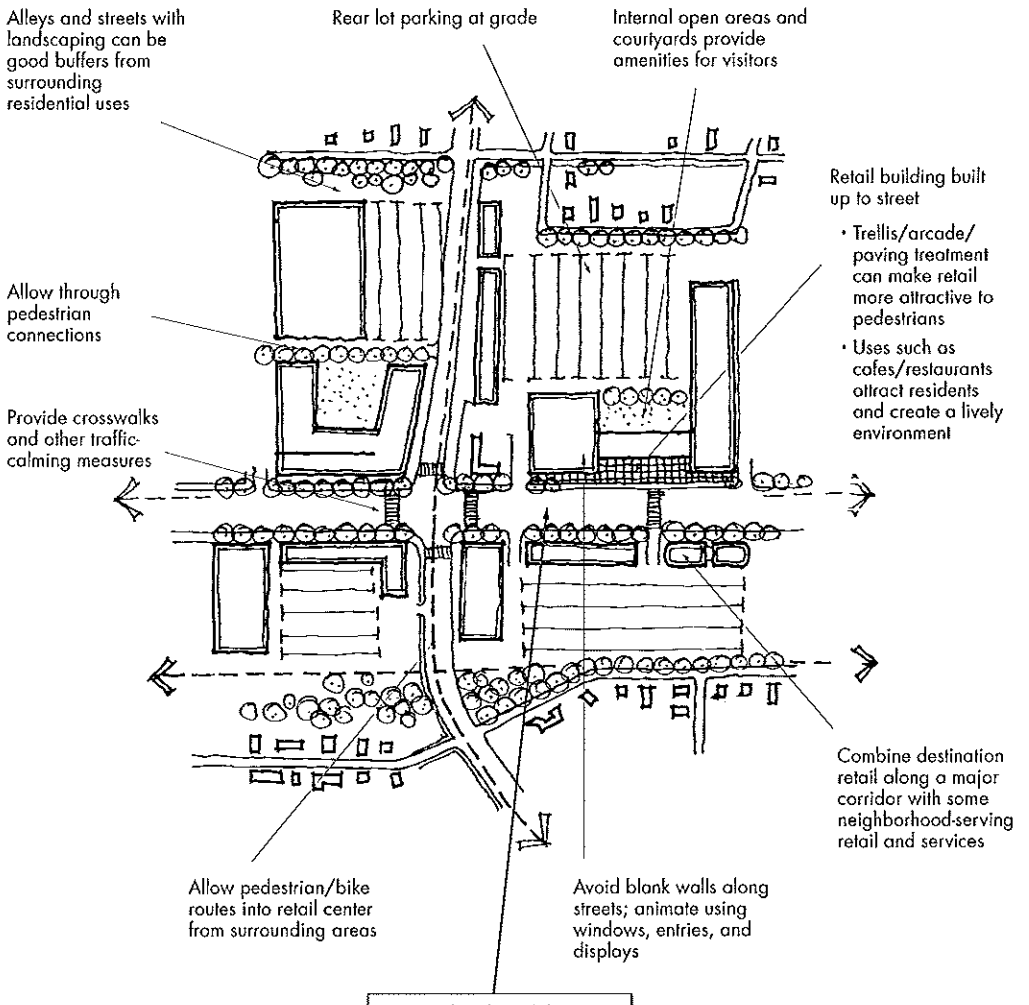


Figure 5-14 RETAIL CENTER: Best Practice



Typical Multimodal Street: Commercial Street without Access Management

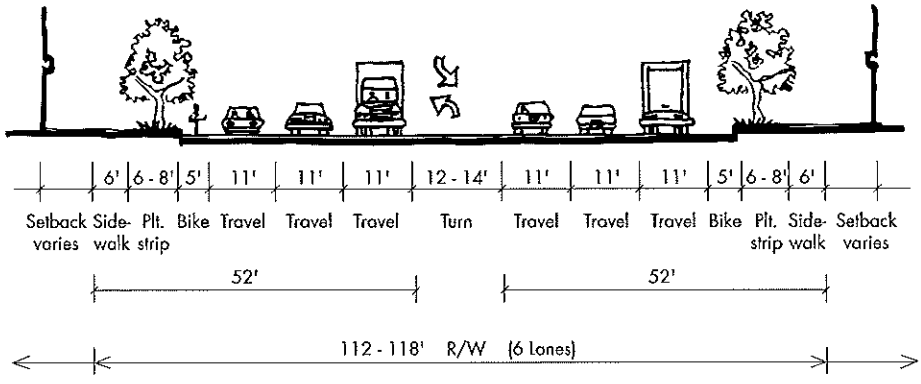


Figure 5-15 URBAN BIG BOX RETAIL: Existing Conditions

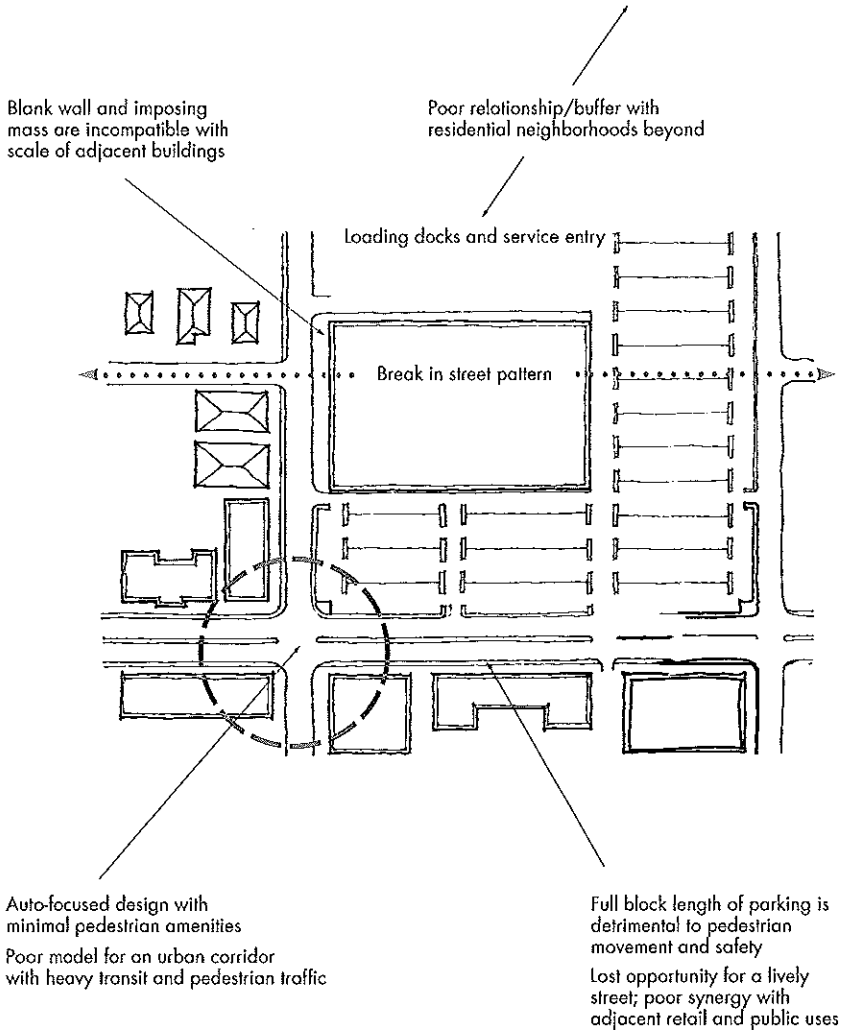


Figure 5-16 URBAN BIG BOX RETAIL: Best Practice

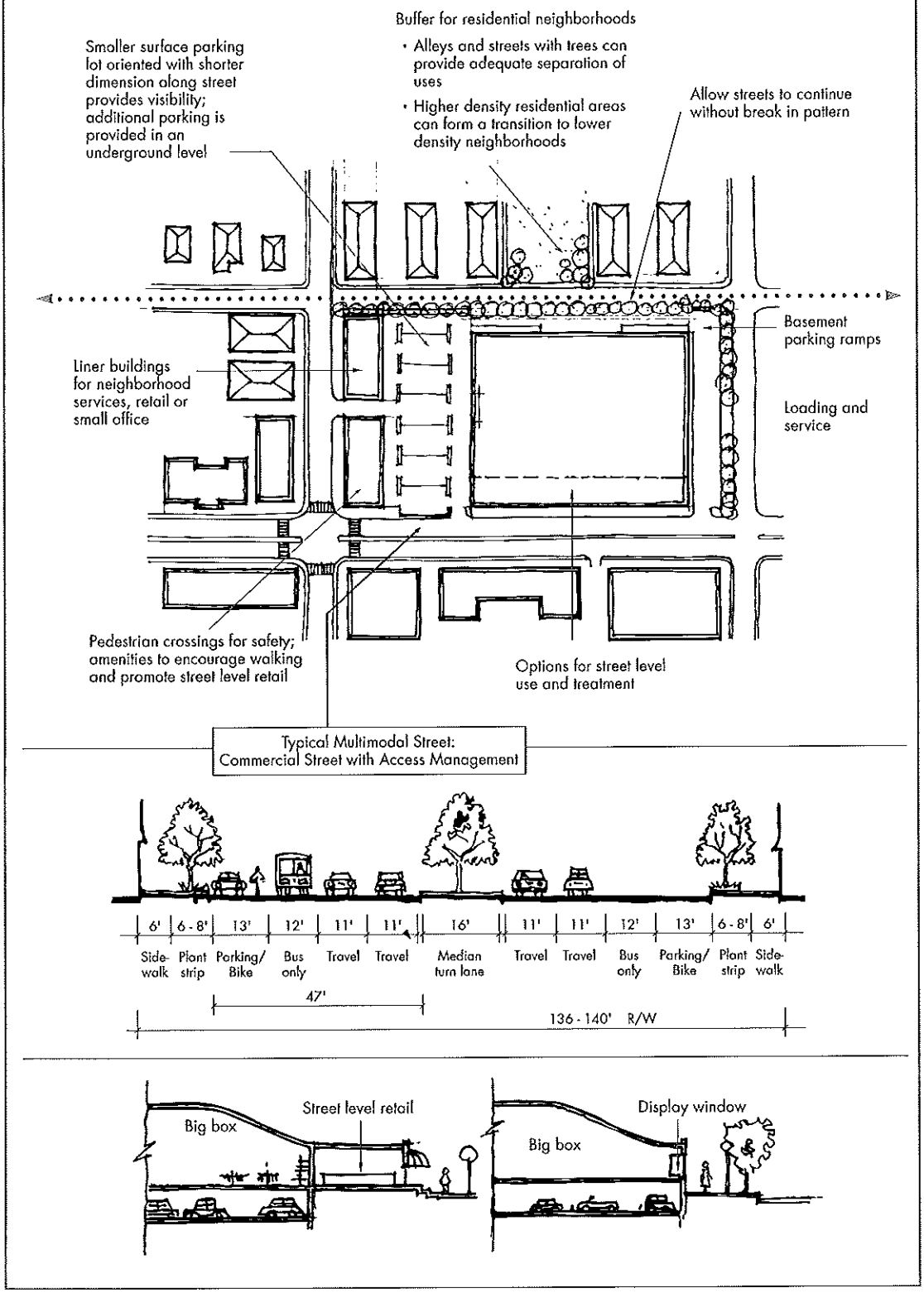


Figure 5-17 NEIGHBORHOOD SCHOOL: Existing Conditions

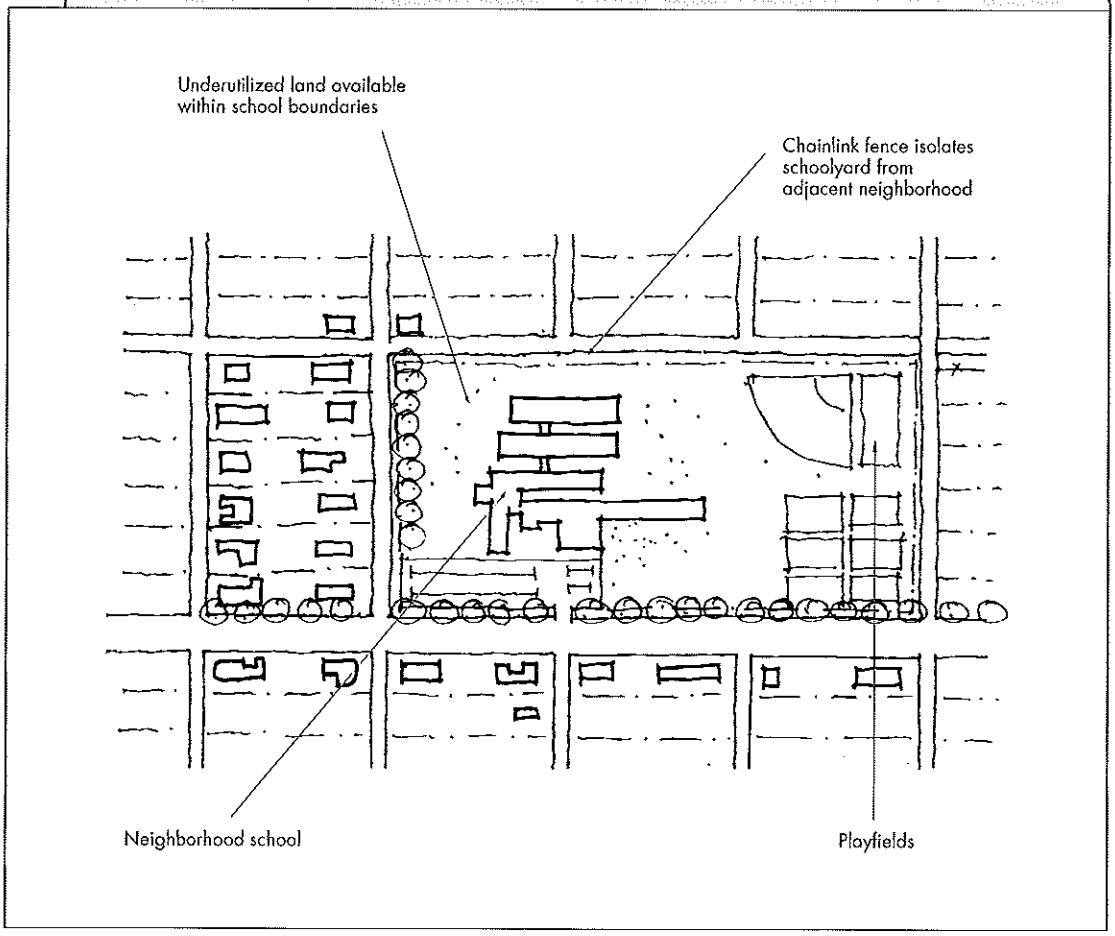
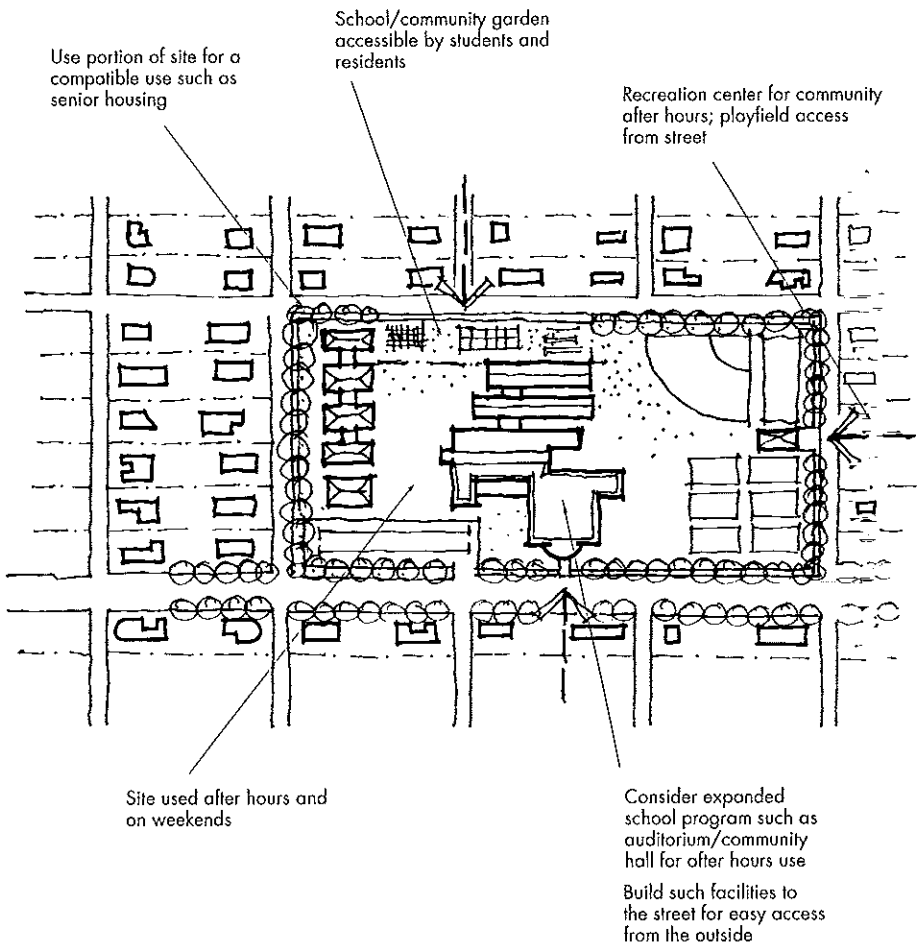


Figure 5-18 NEIGHBORHOOD SCHOOL: Best Practice



VISUALIZING BEST PRACTICES

One of the most difficult aspects of gaining acceptance of new ideas or proposals is describing them. For this, words alone often fall short. No matter how good the verbal description, creating a mental image—or visualizing—new concepts is difficult. We must consider also that most people are visually oriented—that is they take in and process far more information by seeing something compared with reading it or hearing it. So perhaps the best way to describe a concept is to "show it."

Technical illustrations and architectural renderings can help, but even they too often fall short, and are open to criticism as being too idealistic, too narrowly focused—for instance, showing the site alone—or unrealistic.

Modern technology has brought us a new tool for addressing this issue—the photosimulation; or computer imaging. This technique has many advantages over those previously available:

- Uses existing conditions on a real site. People can see how things are planned to change within the context of their own community, and understand how proposed development fits within the context of its surrounding.
- Illustrates incremental development phases. In most cases changes won't happen all at once—public improvements have to be made, buildings need to be built and trees and landscaping need to grow out. People can understand how their community might change and look as a result of new development practices and projects.
- Allows experimentation with "design" features and variants of those features. Different building styles, landscape treatments, types of materials, and alternative ways of applying materials and arranging things can dramatically affect the look and feel of places—making them warm and attractive or cold and unappealing. Even small physical changes, such as using brick pavers in a crosswalk instead of zebra stripping or using sycamore trees instead of oaks, can have big payoffs with making places function better and feel more livable.

The photosimulations presented in this section illustrate best practices applied to a wide range of conditions; how projects and improvements can transform places over time, from low-density residential neighborhoods to major arterial streets. Many focus on streets as central themes and all shares key elements as espoused in best practices:

- A policy of long-range vision and incremental implementation
- Strong pedestrian environments that are interconnected and enhanced with amenities
- Intensified mixed-use developments along major transportation corridors
- Transit priority improvements
- Partnerships—public sector improvements and private sector investments
- Policy changes to support best practices

The following photosimulation image sets illustrate best practices applied over time to a typical setting. While in practice changes will accumulate in incremental steps, these simulations illustrate results at key phases of development.

appendix D

DEVELOPMENT DENSITY RECOMMENDATIONS FOR TRANSIT- AND PEDESTRIAN-SUPPORTIVE COMMUNITIES

VTA's Community Design and Transportation (CDT) Program advocates compact, mixed-use development at sufficient densities to support the transit system and make vibrant pedestrian-oriented communities. This development should occur in cores, along major transportation corridors, and around station areas throughout the county (see Chapter 1, pp. 10 for a map.) This Appendix discusses the benefits of thoughtfully designed and placed compact mixed-use development, and presents development density guidelines to assist local jurisdictions with making transit- and pedestrian-friendly communities.

Growing compact, mixed-use development supports the CDT's four underlying *Key Concepts of Best Practices* presented in Chapter 1 of this manual:

Place-making—focusing on the human-scale elements of the built environment that create uniqueness and identity, and make places attractive, comfortable and memorable.

Access by Proximity—clustering complementary land uses and well-designed compact development to eliminate, combine or reduce the length of trips and help achieve the kind of critical mass that makes vibrant public life possible.

Interconnection—interconnecting streets, pedestrian and bicycle networks, transit modes, buildings and developments to get more from transportation resources and to form coherent districts and more livable places.

Choice—expanding the range of choices about where we live and work, what kind of buildings we live in, the character of the community, and the means of getting around.

Focusing development in areas with major transportation and urban infrastructure also helps VTA optimize its transportation investments and provides increased service levels and community amenities for residents and workers living in and adjacent to these areas. Development pressure on outlying "greenfield" and natural open space areas is reduced, and development practices become more sustainable and regenerative.

The essence of community comes from the elements of character and design that define "place," many of which are intangible and qualitative. A one-size-fits-all formula for designing and building compact or mixed-use developments applied universally isn't practical, or desirable. There are, however, fundamental, time-proven design practices that can work to create harmonious, vibrant, enduring and memorable communities—providing communities with areas of compact mixed-use development is one of them.

Achieving the full benefits of this practice will take vision, continued commitment, and

High-rise, even low-rise density is not, by definition, bad and, in fact, it is the only thing that makes feasible a cost-effective and efficient urban infrastructure. Cities must have sufficient density to function well.

Roberta Brandes Gratz with Norman Mintz
CITIES—Back From the Edge, A New Life for Downtown

patience, and it will not be without times of difficulty or controversy. Additional information on the issues and strategies associated with providing high-quality compact mixed-use development can be found in Chapter 6, Local Government Actions, and Chapter 7, Identifying Opportunities and Overcoming Barriers.

Density Considerations

Minimum building densities in cores, corridors and station areas are essential for bringing out the qualities of place, to receive maximum benefits from infrastructure investment, and to avoid wasting precious transit and pedestrian-oriented land. Maximum densities are set by local plans. Mixing uses can occur vertically or horizontally. Vertical mixing is encouraged in areas where strong pedestrian environments are desired. Building densities should in general be highest in a central core, and directly adjacent to a corridor or station area, with decreasing density moving outward. Thoughtful street design of transit and pedestrian-oriented streets can create opportunities for placing primary and secondary employment centers that compliment cores and station areas, and link together "nodes" of compact clusters of homes, businesses and activities. Lastly, building and site design that considers its context and surroundings bolsters the pedestrian environment. Designing in context is essential to maximizing benefits and making compact mixed-use developments work.

BUILDING DENSITY RECOMMENDATIONS

Table D-1 (on the facing page) presents recommended minimum and average building densities for cores, corridors and station areas. Residential densities in this table are in net acres (total residential acres / total dwelling units.) Averaging density allows a wide variety of densities within these planning areas, and gives jurisdictions flexibility to locate intensified development where it is most appropriate for their communities. Table 2 illustrates this variety.

As a guide for better understanding these recommendations, the following summarizes characteristics of each area:

Regional Core

Regional cores offer the greatest opportunities for compact mixed-use development, and can support the most intense and richest variety of land uses. Opportunities abound for blending transportation facilities, architecture, and urban design to create attractive and memorable places of intense activity where people can live, work, shop, learn, and play. Regional Cores should be walkable, pedestrian-oriented areas that function as centers of cultural, education, business and civic activity designed to serve the needs residents both in the city and the surrounding region. Ground floor retail, entertainment, and cultural activities should abut streets and paseos.

In addition to mixed-use high-rise office and residential buildings, density may come from the revitalization of warehouses and industrial buildings into commercial/retail

TABLE D-1. MINIMUM AND AVERAGE BUILDING DENSITY RECOMMENDATIONS

LAND USE	Within 1/4 Mile of Rail Station or Major Transit Center		Within 1/4 mile of Major Bus Stops	
Residential	**Average Density***	**Minimum Density***	**Average Density***	**Minimum Density***
Regional Core *[1]	85 [1]	60 [1]	50 [1]	30 [1]
County Core	45	25	25	20
Local Core	40	20	20	15
Station Area—regional *[2]	75 [2]	55 [2]	35	25
Station Area—local	45	30	20	15
Rail Transit Corridor [3]	35 [3]	20 [3]	25 [3]	15 [3]
Bus Rapid Transit Corridor [4]	40 [4]	20 [4]	40 [4]	20 [4]
Suburban Areas	18	12	10	7
Office	**Target Floor to Area Ratio (FAR)**		**Target Floor to Area Ratio (FAR)**	
Regional Core	5.0		2.5	
County Core	3.0		2.0	
Local Core	2.0		1.0	
Station Area—regional	4.0		2.0	
Station Area—local	2.0		1.0	
Rail Transit Corridor [3]	3.0		1.5	
Bus Rapid Transit Corridor [4]	2.0 [4]		1.0 [4]	

*Dwelling units per acre
[1]Project target density for Regional Core: 150–200 DUA
[2]Project target density for Regional Station Area: 100–150 DUA
[3]Within _ mile of the corridor
[4]Within 1–2 blocks, or approximately 100–200 meters of the corridor

VTA encourages developing at the highest possible densities around regional rail stations and regional core areas, like downtown San Jose. In certain areas, residential densities in excess of 150 to 200 dwelling units per acre may be desirable to support the transit system and foster lively, walkable communities. In addition, it is essential that these areas provide for a sufficient mix of ground floor services and creative, high-quality project designs.

The figures presented in these tables are VTA recommendations. Jurisdictions should determine the appropriate densities during their planning processes. VTA's goal is that these recommendations be considered during those processes.

TABLE D-2. EXAMPLE AVERAGE DENSITY RANGES

DUA*	% of Total Area	DUA*	% of Total Area
200	5%	100	10%
100	10%	75	25%
75	15%	50	20%
50	25%	40	25%
25	45%	30	20%
55 [1]	100%	55 [1]	100%

*Dwelling units per acre
[1]Average DUA

Average densities can be reached in a number of ways. Table D-2 (at left) shows two ways of mixing proportions of various densities to achieve an average density of 55 DUA.

centers, mixed-use centers or live/work lofts. Building height and mass should define view corridors, and landmarks should orient pedestrians and drivers with their surroundings. Streetscapes should include trees, landscaping, public art, on street parking (where possible), and human-scale architectural features, lighting and signage.

Average Residential Density range: 35-85 DUA

Floor Area Ratio: 2.5 and higher

Land Uses: Commercial, office and residential; many mixed-use high-rise buildings with street level commercial/entertainment and residential and/or office above

Transit: Major facilities, regional connections, multiple bus lines, and possible light and heavy rail transit

Access Sphere of Influence: Regional, County, Local

County Core

County cores share many of the same attributes as regional cores on a somewhat smaller scale. County cores may be city centers or station areas that provide core services and activities and act as a destination for surrounding residential areas and employment sites. County cores may be local downtown or main street environments or areas that provide sufficient services and activities to function as de facto Village Centers for surrounding communities.

Average Residential Density range: 25-45 DUA

Floor Area Ratio: 2.0 and higher

Land Uses: Commercial, office and residential; mixed-use buildings, street level commercial/entertainment with residential and/or office above

Transit: Multiple bus lines, and possible light and heavy rail

Access Sphere of Influence: County, Local

Local Core

Local cores may be city centers or station areas that provide core services and activities to the local community and employment sites. Local cores are primarily local downtown or main street environments. They may also be areas with unique cultural history or nodes of mixed-use activity along streets or at major intersections. These areas often have a pedestrian orientation, historic buildings, and narrow streets that bring an added sense-of-place and identity.

Average Residential Density range: 20-40

Floor Area Ratio: 1.0 and higher

Land Uses: Local retail and services, some office and residential; mixed-use low-rise buildings with street level commercial/entertainment and residential and/or office above

Transit: Local bus line(s) and possible light and heavy rail

Access Sphere of Influence: Local

Station Area: Regional

Elements of development scale and intensity, and transit service levels distinguish Regional Station Areas from Local Station Areas. These station areas function as multi-modal focal points where several transit lines and modes converge. These areas can have similar functional attributes as regional and county core areas, and may offer more opportunities for cultural and civic activities and more intense concentrations of employment and housing.

The highest densities, and greatest mixture and diversity of land uses should be located close to the station. Transit and pedestrian-oriented streets should link the station area with surrounding communities and job sites. Landmarks, view corridors and natural landscape features (such as rivers, parks, or hills) should be used to orient pedestrians, bicyclists and drivers. Parking garages should be mixed use with ground floor retail and service uses. See Appendix C, Community Design for Station Areas, for additional information and ideas.

Average Residential Density range: 35-75 DUA

Floor Area Ratio 2.0 and higher

Land Uses: Commercial, office and residential; many mixed-use mid-rise buildings with street level commercial/entertainment and residential and/or office above

Transit: Major facilities, regional connections, multiple bus lines, and light and/or heavy rail transit

Access Sphere of Influence: Regional, County, Local

Station Area: Local

Local station areas can function as community focal points and centers of activity and services. If located within a local core area, such as near a downtown or Main Street area, station area design can compliment and enhance the overall urban experience featuring land uses and design attributes that generate all-day activity and active pedestrian-oriented environments. The highest densities should be located adjacent to the station area and along major roadways leading to the station area. Secondary "nodes" of compact development may be located along these streets. Parking garages should be mixed use with ground floor retail and service uses. See Appendix C, Community Design for Station Areas, for addition information and ideas.

Average Residential Density range: 20-45 DUA

Floor Area Ratio: 1.0 and higher

Land Uses: Commercial, office and residential; many mixed-use buildings with street level commercial/entertainment and residential and/or office above

Transit: Light and/or heavy rail transit, multiple bus lines, and possible park-and-ride lot and regional connections

Access Sphere of Influence: County, Local

Rail Transit Corridor (see Station Areas)

Streets should be designed for bus feeder service that supports adjacent residential, commercial and employment areas with frequent service connections to rail stations. In light rail corridors Rights-of-Way (ROW) may present opportunities for linear parks, and pedestrian and bike paths. The highest densities should generally be located adjacent to station areas and along major connecting streets, especially streets with a transit or pedestrian orientation. Commuter/Heavy Rail Stations, and stations served by multiple rail lines may support additional development intensities.

Average Residential Density range: 25-35 DUA

Floor Area Ratio: 1.5 and higher

Land Uses: Commercial, office, manufacturing, industrial, and residential; mixed-use areas near stations and along connecting multimodal streets with street level commercial/entertainment and residential and/or office above

Transit: Multiple bus lines, and light and/or heavy rail transit

Access Sphere of Influence: Regional, County, Local

Bus Rapid Transit (BRT) Corridor

Bus Rapid Transit Corridors differ from rail corridors because they are more multimodal in nature typically sharing the travelway with pedestrians, bikes, cars and local bus lines, and because they directly interact with adjacent land uses. The BRT travelway is characterized by roadway design features that favor walking, biking, and transit operations, such as exclusive bus lanes, bus by-pass lanes and signal preemption at intersections, timed signals, bike lanes, curb bulbouts and wide, landscaped sidewalks. The street acts as an extension of adjacent land uses and stations are spaced closer together (approximately every 1/2 mile) than with a light rail of commuter rail line. They also differ in the land use interface. Many potential BRT corridors in Santa Clara County emphasize commercial, manufacturing and light industrial land uses adjacent to the roadway, with medium or low-density residential land uses a parcel or two away from the corridor.

Land uses should be mixed both vertically and horizontally. The most intense development should be located on parcels bordering the street, and should step down moving away from the corridor (see Chapter 5 pages 42 & 43 for an example of stepping down.) The character of land uses may be similar in density and scale as a local core or local station area, except at major intersections where local and regional bus lines may present opportunities for nodes of greater intensification and mixtures of land uses. Some nodes may be commercially oriented, some office.

Average Residential Density: 40 DUA

Floor Area Ratio: 1.5 and higher

Land Uses: Commercial, office and residential; many mixed-use buildings with street level commercial/entertainment and residential and/or office above

Transit: Multiple bus lines and transfer opportunities, possible regional connections

Access Sphere of Influence: County, Local

See Appendix A, Community Design for Bus Transit for additional discussion of BRT design and operational characteristics.

Suburban Areas

Residential densities within suburban areas near rail stations or bus facilities should have a minimum net density of 7 DUA to support minimum local and feeder bus service levels. 15 DUA is recommended for areas closer to stations or major bus stops. Business parks, shopping centers and other major trip generators should be placed as close to transportation facilities (freeways, expressways, transit lines) as possible and not scattered throughout the community. Thoughtful and integrated design of building sites, structures, streets, transit and pedestrian facilities tend to be most overlooked in suburban areas, but are nevertheless essential for affirming a presence for transit and place-making characteristics.

Average Residential Density range: 10-18 DUA

Floor Area Ratio: N/A (locate employment areas near major transportation facilities)

Land Uses: Residential, some commercial/local services; mixed-use buildings with street level commercial/entertainment and residential and/or office above mixed use near train station or transit centers

Transit: local bus line(s), possible light rail

Access Sphere of Influence: Local (County for employment areas)

Retail Land Uses

With retail development, considering the type of retail and its relationship with surrounding land uses can often be more important than density. Mixing retail with other uses, such as offices and residential units, and the proportions of that mixing, is also a factor. Local retail (such as restaurants and coffee shops, book and video stores, and cleaners and community markets) can conveniently meet the needs of residents and riders close to their homes and transit stops. Shopping malls and other large regional facilities can be fully integrated with transit and become key community focal

points. In the right setting and with the right building and site design, large mega-store retailers, like supermarkets and drug stores, can be made more pedestrian-friendly, comfortably coexisting with and complimenting surrounding establishments. Research suggests the following as a general retail mixed-use guideline:

- 25 to 30 percent retail (primarily or exclusively ground floor)
- 70 to 75 percent office / residential

Although big box developments such supermarkets and discount outlets tend to be auto-oriented, and therefore generally transit and pedestrian-unfriendly, design treatments can make these developments more transit and pedestrian-friendly and add value to the definition of the street. These include considering the scale and design of surrounding buildings, orienting the building—and bringing at least one entrance—to the street, providing human-scale details attractive pedestrian-oriented features, and connecting pedestrian and bike facilities with surrounding bus stops and train stations.

Industrial Land Uses

Industrial-type facilities having high concentrations of employees, and located near transit, can be well served with traditional fixed-route transit services. Industrial use sites, such as warehousing and manufacturing facilities, are typically more disconnected from one another and land uses tend to be space-intensive rather than labor-intensive, which means fewer employees with longer walk distances. In Santa Clara County, the many high technology firms complicate design and integration issues because employees of these firms often have highly varied work hours and travel patterns, and don't fit well within traditional industrial job classifications. In these situations, shuttle services to transit facilities should be pursued. Providing integrated pedestrian, bus stop and roadway infrastructure improvements is necessary to support shuttle services and provide connectivity between sites and services. Lastly, site and building design remain important considerations, and every effort should be made to organize parking, building entrances, and nodes of services to reduce walk distances, and maximize the pedestrian environment and connections with transit.

Compact mixed-use development must include high-quality design. The belief that good design must be more expensive than bad design lives in the land of the mythical—a little more thought is often all that is required.

DESIGN AND IMPLEMENTATION STRATEGIES

Implementation strategies and design practices should be considered together. There are a number of implementation strategies and a wide range of design practices for bringing vibrant compact developments into communities that respond to local settings and character.

Implementation

Maximum densities should be set by local jurisdictions in conjunction with innovative planning and implementation strategies such as specific plans, overlay zones, special