COMMUNITY
Sustainable communities have the following components:

**Flexible**
Having the ability to adjust over time.

**Equitably Sustainable**
Across age groups and in access to amenities.

**Economically Sustainable**
Non-isolated, maintaining economic value with sustained economic activity.

**Environmentally Sustainable**
Efficient resource use and connect residents to the environment to enhance sense of ownership.

This chapter establishes guidelines for how best to plan for sustainable communities in Shanghai. The contents are outlined below.

**Connections**

Building connections is critical to creating sustainable developments in Shanghai. In this section, three types of connections are considered.

» **Security**
Secure communities offer a sense of safety without separating residents from each other and amenities.

» **Access**
Access is required to meet the requirement of flexibility and equitability.

» **Internal Circulation**
Circulation links residents to on and off-site amenities.

**Amenities**
There are three types of amenities considered in this section in relation to sustainable development in Shanghai:

COMMERCIAL RECREATIONAL SERVICES
connections

SECURITY

value
Effective use of systems that secure but do not isolate a development.

goal
Minimize the visual presence of security systems while maintaining residents’ sense of security.

user needs

children
For young children, security and safety are intertwined. They need to be protected from car traffic, and easily watched.

teenagers
Teens will desire semi-private spaces to congregate, which must be distinct spaces but not “blindspots.” The security systems that young people encounter will be formative in their ideas of security and public-private interaction.

parents and single/double income no kid households (SINK/DINKers)
Parents, SINK/DINKers have similar security needs, though parents will be more concerned about the needs of children. These adult groups are more likely to enter the site after daylight so lighting will be important, as well as security of material possessions.

seniors
Security should not create a barrier to access for seniors. Seniors can serve as “eyes on the street” during the day.

current practices/baseline standards

holiday town
Holiday Town employs a large number of uniformed security guards to monitor pedestrian and vehicular access to the site and the villa area within the site. In addition, conspicuously placed security cameras feed back to the security office in the management office. Access points are limited; the site is otherwise walled off from surrounding communities. Pedestrian entrance gates and individual buildings use a keycard or code entry system.

context

qibao, urban
An urban context, like Site 53, presents the challenges of creating a sense of security while integrating the site into existing pedestrian and car traffic. On a mixed use site there will be a large number of non-residents on-site. A dense urban site does, however, present opportunities to use private lobbies, and above ground floor resident spaces.

baima, suburban
Typical suburban developments are surrounded by other gated communities. The Baima site still has agricultural neighbors as well. Entry by car and garage security will be important. There will be fewer non-residents on-site so security systems must address “strangers.”

Daikanyama, Tokyo, uses elevation to provide security
**Case Study**

Address, Daikanyama, Tokyo is a multipurpose development adjacent to an elevated subway stop, first and second floor retail, and residences. The retail, office, and residential components of Address are all clearly visible and accessible from the street and from other uses. Separate entrances, differentiated paving, and changes in elevation (slope) are used to distinguish office, retail, and residential areas.

**Developer Recommendations**

Vanke can easily take the lead in redefining site security, and has already started at Holiday Town. New developments, and redesign at existing developments, should reduce the use of physical barriers such as fences and walls. Existing site features such as canals and slopes; building massing; landscaping features like paving, plantings, and decorative gates; pedestrian traffic, including security personnel; and technology such as card entry systems and closed circuit TV, should be used to create clear distinctions between public and private spaces.

**Municipal Recommendations**

Municipalities can utilize design regulations and review to reduce the use of fences and walls, particularly around areas designated for public use. In addition, they should facilitate meetings between the management firms of neighboring developments, as well as local police, to address safety and security issues on a district level.
ACCESS

value

Increasing access through increased on-site/off-site flows and exchanges enhances community quality and sustainability by enabling residents to utilize surrounding amenities.

goal

Create strategically porous boundaries that do not conflict with security interests to increase amenity use within and outside of the development.

user needs

Porous boundaries affect age groups similarly by increasing access to the amenities that each group seeks. Desire for porous boundaries probably varies more individually than between groups. All would likely benefit from the more diverse, active, and lively community that would be created by breaking down the insularity in a region.

context

qibao, urban

The value of more porous boundaries is more immediate in urban areas, where developments may be smaller with fewer on-site amenities. Residents of Site 53 would benefit from easy access to the large neighboring commercial areas. Creative strategies should allow for privacy in a busy environment while providing convenient links to transportation, commercial areas, and other amenities.

baima, suburban

Suburban developments are larger and more self-contained in terms of community and amenities. If there are few nearby amenities, like at Baima, a porous boundary may not seem justified at first. However, the rapid development of Shanghai ensures that amenities will appear over time. Adopting strategies towards creating a porous boundary now may encourage similar strategies at neighboring developments and lead to a more integrated area once the region is developed. Canals offer a great opportunity for flexible boundaries.

current practice/baseline standards

shanghai

Most Shanghai developments appear to be mostly private with few access points, generally large gates preventing outsider access.

case studies

the falls at arden mills, fitchburg, ma: (204 units along the Nashua River) This gated community has a private river walk on one side of the development and a public bike path under construction on the other side. This path will provide cyclists and pedestrians attractive and convenient access to local sports events and concerts at the civic center, a public library, and shops and other facilities not contained within the development.

suzhou, china: Attractive examples of public canal walks and linking bridges can be found in designs for restoration of canals in Suzhou. These designs create pleasant, public, partially commercial spaces facilitating formal and informal interaction.
developer recommendations

general

» Design variety of subtle access points: These should improve flow while maintaining a sense of privacy and community inside the development.

pedestrian

» Provide pedestrian-specific access: Pedestrians access points should be distinct from vehicular access and provide direct, convenient access to homes and amenities via attractive walkways with view that encourage easy orientation and safety. Pedestrians should also have easy access to commercial services, reducing vehicular congestion and improving potential for informal interaction.

vehicle

» Baima: Access points should be multiple off of the north-south oriented roads and serve all areas of the development. Delivery access should be provided to the commercial area and a separate public entrance to parking lots near amenities intended to serve a regional market.

» Site 53: Access to vehicles should be limited to one parking entrance near Soho offices and other commercial developments off of the main road. If a public parking deck is built to serve a hotel or large-scale commercial area, a separate entrance should be built taking into account effects on traffic flow.

boundaries

» Create more intermediate, public-private spaces: Similar to our recommendations regarding security, a “grey area” of intermediate space between public and private space should provide a soft boundary.

» Create more public areas on development boundaries when appropriate, making use of available amenities: If the canals can be cleaned, they can be utilized to create a vibrant public or private space on the edge of developments, softening the boundaries and possibly linking developments. These areas should be designed for pedestrian use, with some bicycle paths.

Smaller, less formal commercial spaces can provide an alternative to large markets. To encourage use there should be subtle access points that lead residents out but do not draw outsiders in.

phasing

We use the example of creating a public walk along the canal to illustrate phasing issues with providing a wider variety of access:

1. Improve the quality of the river can be improved and build multiple access points and small-scale intermediate areas.

2. Create an attractive river path, a pleasant open space for joggers, walkers, and other people from the development wishing to enjoy a more natural outdoor path. Space should be retained for future commercial and community services.

3. Bring in a few anchor tenants and subsidize new commercial tenants.

municipal government recommendations

Require more regional consideration of coordination between developments and establishment of softer boundaries, multiple access points, and a certain number of diverse public spaces within a region of numerous developments.
INTERNAL CIRCULATION

value
Regular interaction between residents of all generations builds a sense of community.

goal
Facilitate regular resident interaction through site and building design as well as programming that encourages pedestrian and bicycle traffic along common pathways and create a vibrant, pedestrian-accessible commercial node.

user needs
The planning of internal circulation is of particular importance with respect to children and seniors. The circulation paths should be established and designed to ensure the safety and comfort of these age groups. In addition, needs will vary for different modes of transportation such as pedestrians, bicycles, and vehicles. Design choices made regarding internal circulation can influence the residents’ choice of transportation.

current practice/baseline standards

shanghai
Internal circulation in Shanghai developments appears to be left to the purview of each individual developer. This often results in internal streets that do not line up or continue from development.
to development.

holiday town

At Holiday Town, there is a public street that cuts through the site, separating the northeast quadrant of the development from the rest of the site. Vanke has placed commercial and community uses along this road, ensuring high visibility and access for vehicular traffic. On a pedestrian level, however, the attention seems to be on security over access.

case study
downtown mountain view, ca: Castro Street was narrowed from a four lane street to a two lane street. This allowed for wide sidewalks lined with benches, sidewalk cafes, planter boxes, trees, and lampposts. The downtown's sidewalk cafes, parks, and outdoor plazas make it a great public place for all ages to interact with one another while supporting the local businesses.

developer recommendations

» Ease physical conditions by providing adequate walkway, seating, and protection from the elements: Comfort is one of the decisive factors in determining walking distance, along with safety, security, convenience, continuity, system coherence, and aesthetic quality.

» Create “shortcut” pedestrian- and bicycle-only pathways: Landscaping such as the canal system can be used as a natural barrier to deter automobile use while pedestrian bridges can be utilized to provide a pedestrian benefit in addition to a pleasant aesthetic experience. This can also create a “safe zone” for children to commute without the threat of vehicular accidents.

» Control traffic speeds: Design internal streets so as to keep vehicular traffic speeds low by using narrow widths, on-street parking, street trees, and other traffic-calming methods.

» Develop a commercial hub that is pedestrian-accessible and encourages social gathering: Incorporating commercial nodes into the residents’ path of travel will both support the economic viability of local establishments and add elements of interest to encourage pedestrian activity throughout the development. This in turn will lead to increased exposure of residents to one another, especially if the commercial hub becomes a destination where one can go to convene and socialize.

municipal government recommendations

» Design land use plans that create mixed-use pedestrian-friendly commercial hubs to encourage social gathering.

» Incorporate commercial nodes into the residents’ path of travel to both support the economic viability of local establishments and add elements of interest to encourage pedestrian activity throughout the development. This in turn will lead to increased exposure of residents to one another, especially if the commercial hub becomes a destination where one can go to convene and socialize.
amendities

COMMERCIAL

value

Commercial facilities that meet the needs of the internal and external community will improve their economic viability and enhance the fiscal sustainability of community amenities.

goal

Phase, locate and encourage a diverse mix of commercial amenities to create a sustainable economic core.

user needs

Commercial facilities should cater to residents of all ages such that the experience of frequenting commercial establishment becomes one where all members of the community can interact with one another.

context

qibao, urban

On urban sites, the amount of commercial space that can be supported will be far greater than the demand of just the residents. In particular, with a transit-oriented development, a developer has a responsibility to be more regional in their approach to the site program, given that the facilities will be accessible by many more than just the development’s residents.

baima, suburban

At a new greenfield development, the developer needs to realize that the initial demand for retail may be low as the development gets built out, but the lack of surrounding neighborhood amenities means that certain commercial services should be provided, and subsidized by the developer until the resident population grows to a level to be able to support the commercial facilities.

current practices/baseline standards

Shanghai Standard:

Retail: 120 m2/k persons built, 228 m2/k persons land

Holiday Town:

Commercial: 16,000 m2 total built, 13,720 m2 total land

Ground-floor retail along major north-south artery in Qibao.
This building type can accommodate shifts between residential and commercial demand, ensuring that market volatility is tempered (programmatic flexibility).

Design common spaces along the path of entry to encourage casual interaction: Common spaces with units’ entries opening onto them increase the chances of casual meeting.

**Developer Recommendations**

- Locate retail and food service establishments along major arteries: Siting commercial amenities to take advantage of both pedestrian and vehicular through-traffic is vital for their economic health.
- Develop flexible, modular shells: Design retail bays that can accommodate establishments of different sizes and uses over time (physical flexibility).
- Develop flexible “SoHo” space: This building type can accommodate shifts between residential and commercial demand, ensuring that market volatility is tempered (programmatic flexibility).
- Design common spaces along the path of entry to encourage casual interaction: Common spaces with units’ entries opening onto them increase the chances of casual meeting.

**Municipal Government Recommendations**

- Increase levels of commercial development around transit nodes to create a critical mass of retail and to encourage transit-oriented development.
- Allow for flexible live/work zoning to allow for flexibility of use.

**Case Study**

**Telegraph Gateway, Oakland, CA:** This 5-story, 45-unit live/work-over-retail project is located on a busy urban corner lot. The building contains three floors of flats above a parking podium wrapped by ground-floor commercial retail totaling 5,000 sf. Many of the units open out onto a central courtyard at the podium level. The nature of the common spaces along the entry path can make the difference between an alienating structure and a fully functioning community. In this project, residents cross paths as they come and go, and opportunities to socialize arise. The architect shaped common spaces along the entry path that encouraged casual interaction, designing the common spaces with the units’ entries opening onto them to further increase the chances of casual meeting.

RECREATIONAL AMENITIES

value
Physical and social stimulation that contributes to community interaction.

goal
Promote a stable, attractive community by providing sufficient access, variety, and integration of recreational uses. Facilities and programming that provide opportunities for formal and informal resident-resident and resident-non-resident interaction.

users needs
Appropriate indoor and outdoor recreation amenities should be provided for all age groups.

children
Children will primarily need outdoor playgrounds and indoor space for socialization (i.e., child care) until they are school age. School age children will use amenities after school and on weekends; socialization with other on-site children will be important given school patterns and can also create connections between parents.

teenagers
Teens should be provided with space and programs that allow them to develop independence and site-based friendships.

parents, SINK/DINKers
Parents, SINK/DINKers have similar schedules, using recreational activities during evenings and weekends. These two groups are most likely to interact during virtual or real interest-based activities like flower-arranging classes or car clubs. Parents are more likely to participate in intergenerational activities.

seniors
Seniors are likely to be daytime users of recreational amenities and, like children, their physical safety should be considered in amenity design. Through regular use of amenities, seniors can provide an important degree of stability.

context
In both urban and suburban environments, Vanke favors a centralized clubhouse model for recreation.

qibao, urban
An urban context will likely have alternative facilities available to residents, like the sports facilities nearby Qibao. This opportunity to customize on-site facilities must be balanced with conventional use of the clubhouse as an identity creator. In the urban context, there is also an opportunity for multipurpose spaces that could be used for business or cultural events, and provide additional users and income for the facilities. Open space will be at a premium in urban areas and should be multifunctional for highest efficiency.

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shanghai
Senior Center: 24 m²/1k persons indoor, 48 m²/1k persons land
Public Green Space: 2000 m²/1k persons

holiday town
Public Green Space: 12,113 m²/1k persons
Sports and Cultural: 4177 m² total indoor, 6655 m² total land

case study
the jewish community center, san francisco, ca: maintains a sense of religious community identity while being an inclusive pay-for-use facility. Programming serves all generations at appropriate hours, including after-school tutoring, a teen “club,” sports classes, book clubs, singles activities, and senior wellness classes. Fitness hours are long to accommodate many schedules. Generally, sports facilities are available at a fee, social activities are available to members, and spe-
cial events/performances are by ticket for both public and members.

**developer recommendations**

- Flexible spaces
- Lobby-type spaces for everyday social uses and cultural events like performances and wedding parties
- Rooms that can be used for games and meetings
- Gymnasiums for multiple sports (basketball, badminton, volleyball)
- Plazas that can accommodate tables and chairs, as well as performances
- Programming throughout facility hours, and hours that accommodate all user types
- Specialized staff to plan and lead programming
- Partner with firms specializing in facilities maintenance and programming, particularly in the urban context
- Facilitate informal interactions through opportunities to exchange information and branch off of formal groups, and by providing physical and virtual space.

**municipal recommendations**

Operational support for sites that provide cultural recreation. Design review of planned facilities to minimize duplication of existing district facilities. Requirements for public access to facilities.
SERVICES

value
Diverse and interactive services, including those that satisfy recreational, health (mental and physical), transportation, informational, and educational needs, increase interactions between residents, engage residents in the community, and promotes healthy lifestyles.

goal
Provide a comprehensive package of age-appropriate services that are linked in such a way as to facilitate intergenerational interaction.

user needs
children
Education and play are key components of children’s service needs. For example, educational opportunities, such as an afterschool tutoring program, could link children to other generations and engage them in their neighborhood.

parents
Parents may require support networks, including daycare and health services, for their children and elderly parents while they work. Family activities are relevant for this group, as well as more individual services such as family planning and mental health services. Parents may be sources of volunteer engagement, perhaps serving as a contact point for the whole family.

SINK/DINKERS
Needs will likely include more social and transportation related activities. SINK/DINKs and other groups may utilize various online communities offering peer consultation on home improvement, pet care, and other aspects of lifestyle choices.

seniors
Seniors benefit from the services of Community Councils including mental and physical health and social activities.

context
qibao, urban
Urban sites may be too small to efficiently provide all required services on-site. Instead, analysis of existing services should yield strategies for linking residents to regional services.

baima, suburban
Services will be more self-contained, but linkages between developments’ services should be facilitated so that residents are connected to a regional network of services.

current practices/baseline standards
See the tables below.
case studies

boston chinatown neighborhood center, boston, ma: A multiservice non-profit agency provides an example of how one organization can provide a variety of services, including inter-generational programs, to improve community life. Boston Chinatown Neighborhood Center is funded by foundations and donations, which is of course a very different structure than what might provide such services in China. It provides adult education, child care (where seniors can volunteer), summer programs for children (including adult mentoring), family services (such as counseling and family activities), and recreational activities at low or no cost to residents of the area. Nonprofits like this organization view members of a community as resources and connect residents through appropriate services.

Churches in the U.S. are another example of community-focused organizations that provide support networks and other critical services through volunteer work. Secular volunteer groups such as the City Cares network in the U.S. offer a variety of volunteer activities for a range of individuals. Examples of projects include spending time with sick and elderly and reading programs for young children.

the bike station, millennium park, chicago: The Bike Station provides extensive transport related services to meet the needs of various users. It offers bicycle parking, valet for special events in the park, lockers, showers, towel service, bike rental, bicycle repair, bicycle tours, a bicycle camp, car sharing, a coffee bar, and internet stations. Membership provides access to all of these services and costs $99 per year or $1 per day. Customers must pay to rent bicycles, including many styles and attachments for children.

the boston schoolyard initiative, boston, ma: is a public/private venture to provide interactive learning environments through the schoolyard. The Initiative aims to create a sense of ownership for sustainable maintenance, which includes the establishment of a “Friends Group” that voluntarily cleans up and beautifies the schoolyard. The goal of the Initiative is threefold: community development, educational innovation, and environmental stewardship. Vanke could follow a similar strategy with playgrounds and open space to provide a multigenerational recreational space where children and adults alike learn about the environment and establish a connection with their surroundings.

developer recommendations

education
» Interactive education: Design open spaces, and playgrounds in particular, to provide interactive educational environment for children.

transportation
» Provide convenient links to existing transportation: The Holiday Town shuttle was not a convenient mode of transportation for the residents we interviewed. Other strategies for linking to public transportation may include car sharing or bike rentals.

health
» Structure comprehensive health services: Health clinics and services should be located within convenient access of homes and clusters of senior housing, but should provide health services for all age groups and strategize on engaging entire family in health care.

information
» Provide online community and other forums for resident interaction: Internet and intranet infrastructure.

service provider
» Expand reach of Community Council: Vanke can provide infrastructure for a more dynamic Community Council or a new group that takes a more comprehensive approach to service provision.

other community services
» Nurture a stronger, more engaged volunteer community: Provide support for the development of an engaged, active, volunteer community

municipal government recommendations

The government could rethink the role of the Community Council in meeting the needs of all residents. It should also consider making requirements to ensure that all services are provided within certain areas and think about requirements for linkages between services.