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## Contemporary Master Planned Community Practice

*The authors discuss an on-going research on the planning and implementing of master planned communities in different countries, and their implications for contemporary planning practice. They show that the developers' goal is for the MPC to become the place "of choice" for residents and employers over the long term, and that success is directly linked to the ability to adapt implementation processes and strategies that meet market and social needs.*

City planners and community designers have always had a fascination with the concept of master planned communities (MPC). The MPC ideal was used by Ebenezer Howard to organize his design for the 'garden city' the designers answer to the environmental and community problems arising from the industrial revolution in Europe. In the United States MPC concepts, influenced by Howard, were tried in our own garden cities movements, as well as the federally sponsored "new towns" efforts during the 1970's. The MPC remains, especially, in the western United States a powerful ideal to create more livable environments. The contemporary MPC of today is not a "garden city" in the sense of meeting all employment, housing, cultural, public transport and recreational needs for a population of 50,000 people as was the case for Ebenezer Howard. Today's MPC are attempts at providing some balance between housing, recreation, security, employment and cultural within the given boundaries of a single land use plan that is built in phases as a response to market demands and regulatory requirements.

So, how would you go about designing for a land parcel of 10,000 acres? To better understand the contemporary MPC process and what it produces we examined a group of master planned communities and new towns that have been built over the past 40 years. We wanted to understand the major elements related to the land planning, the urban design, and the implementation of these projects and how these elements influence a project's overall success.

To obtain a more global perspective MPCs nine projects located in the United States, and five outside of non-US (Brazil, Singapore, China, Spain and Vietnam) were examined. While all the US projects are all privately sponsored, those in China, Spain and Vietnam have some form of government participation. MPCs tend to locate at the urban fringe, not far from a major metropolitan area which provides them access to jobs and potential residents.

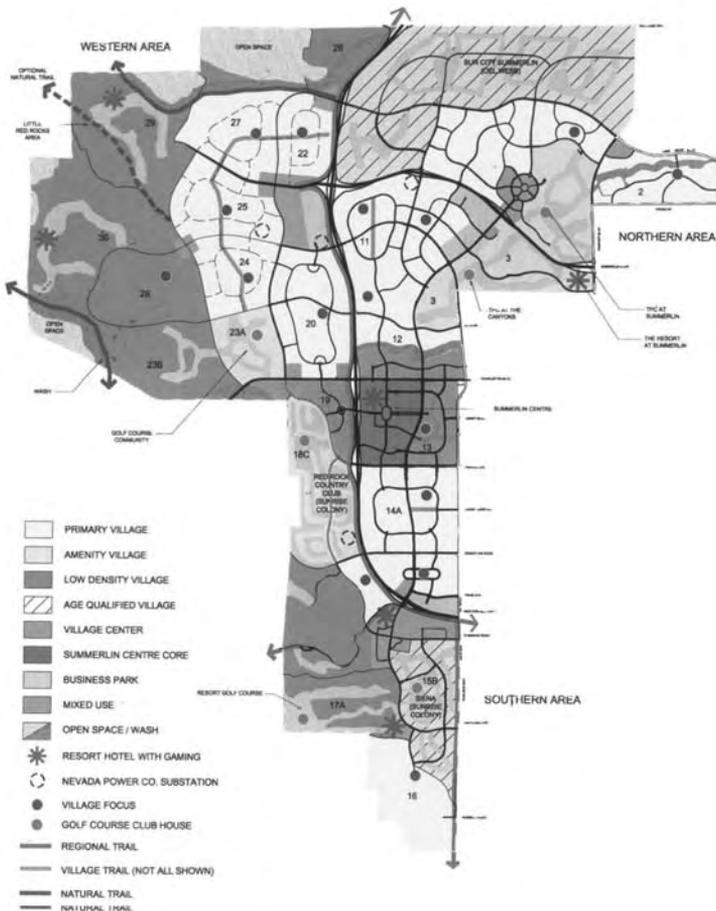


*Fig. 1: Aerial view of Rancho Santa Margarita, California (from Gause, J., ed. "Great Planned Communities". Washington: ULI, 2002).*

In order to understand what MPC were, and are, we established some common elements that help define them as creators of urban form. For the US the composite MPC profile is about 5,000 acre plus land area, 40% of which is in recreation/open space uses. The basic unit of design is the 'village' of 300-400 acres. Villages are linked together by road hierarchies and recreation systems, with groups of villages forming the demand for localized (not neighborhood) retail. The MPC provides substantial employment opportunities in its office and business parks. Social and cultural amenities are present in the form of churches, clubs, and civic associations. Establishing a 'sense of community' is an active part of the establishing viability for an MPC. Constructing a "sense of community" is part of the developers' "social design" process. The homeowners associations bind people together at least in terms of maintaining their common areas and roadways. These "micro maintenance" districts are critical to the long term viability of MPCs as they establish special interest groups that support the MPC internally and externally.

For the non US cases (except for Brazil, which replicates the US model) the projects build vertically, using 6 to 12 story apartment towers, organized in groups to form neighborhoods. Local retail is provided to the building block groups, as is local recreation. In China, Vietnam and Singapore, long term land leases are provided for residential and commercial uses to private developers. The local or provincial governments provide substantial off-site infrastructure support. In the Spanish case, an independent government development corporation was established that sold land to builders and users. In all of these projects the government objective is to provide incentives to the private sector to build housing and employment centers using private capital. This is a public-private partnership model.

Figure 2. Land use map of Summerlin, Nevada (from Gause, J, ed. "Great Planned Communities". Washington: ULI, 2002).



As in the case of the US, the concept of village, or cluster of activities, is a leading urban design concept. People are brought together spatially, and then the other elements, such as parks, transit, schools, employment centers are put in place.

## UNITED STATES CASES

There are common elements for the United State cases. These are:

- **Open Space** - Large percentage of land being devoted to recreation uses and open space. This ranges from 37%-53% of the overall project area. Irvine Ranch in southern California has about 50,000 acres of dedicated open space (53%) which includes 10 miles of off-road bikeways.
- **Village** - The use of villages as organizing urban design concepts, with the average village size being between 300-400 acres. Village size does vary depending on landform and topography and recreation amenities. Ladera Ranch, also in southern California, is composed of 6 villages and 3 dense urban-themed residential districts. Summerlin, Nevada is currently composed of 17 distinct villages (30 are planned).
- **Design Guidelines** - Design Guidelines and controls over land uses are important to maintain the character of a planned land use. Design guidelines can be imposed on an entire project, a village, a neighborhood, a commercial center, office park, industrial park, and public uses such as schools and medical clinics. The developers of The Woodlands, Texas (north of Houston) specified design guidelines for each of its 8 villages in order to maintain high standards for housing, shops, offices and other structures.
- **Associations** - Owner, renter, and resident associations are used to generate revenue, to control design types, to maintain property, and organize social activities. Associations are formed for major land use activities, residential, commercial, office. They charge fees by the month or by the assessed valuation of the property. The Woodlands began with two resident associations, The Woodlands Community Association and the Woodlands Community Services Corporation, that were initiated

by the developer. Mature MPCs, such as Mission Viejo, Irvine, and Columbia, have become incorporated cities with elected governments providing services.

- Home Building Companies - Most master planned communities sell lots to many different home buildings companies who actually do the construction at the neighborhood level. This also occurs for apartment buildings, but this is not as frequent as for single family homes. At Weston, in southeast Florida, for example, the major builders were Lennar and Centex Homes. Summerlin, utilized 8 major builders including Pulte Homes.
- Cultural Amenities – Contemporary master planned communities’ seed (initiate) many cultural and social activities and amenities in their projects. This is done to build the social fabric of the community, the places where people meet, where they go to church, where they join social service clubs, and where they engage in cultural and recreational activities. Constructing a sense of community and belonging is a challenge for all MPC projects. Building community participation and social fabric is important to obtain long term financial success. Ladera Ranch Community Services, founded by the developers, purpose is to “facilitate, support, and promote community relations and neighborhood activities” as well as foster clubs, special interest groups and manage a community intranet.
- Security – Making people feel secure is important to the overall success of any project. Security is designed into project through the use of “Gated Community Design”, private security patrols, and active resident associations. Weston, Summerlin, and Poinciana (central Florida) feature gated neighborhoods within their overall development.
- Infrastructure Finance – Paying for street, roads, water treatment and drainage systems, and public recreation is carried on through a public-private partnership where bonds (long term debt instruments) are sold by the local government (or special assessment district) to pay for infrastructure. These bonds are repaid by property owners, or building occupants through assessment districts or owner association fees. Rancho Santa Margarita (southern California) initially financed infrastructure through bank loans, but eventually floated community facility (Mello-Roos) bonds for additional infrastructure, and schools.
- Commercial – Over time commercial uses (retail, office, and light industrial) begin to provide larger portions of the overall project cash flow. The Irvine Company, for example, sold land for residential development, but owns and operates over 40 retail, office and business/industrial centers.



*Figure 3. Performing Arts Pavilion, Woodlands, Texas (from Gause, J., ed. "Great Planned Communities". Washington: ULI, 2002).*

## ASIAN CASES

For the non-US cases there is great variation in development practice. In the Asian cases, the central government plays a major role in location of the projects because there are overall public-interest objectives sought by the central governments. Asian projects are built very quickly, and their absorption rate is high. This means that MPC are built out or populated in short periods of time, and that a much higher level of importance is given to the initial placements of building and roads and the need for support uses such as schools. The residential projects are usually multi-story housing blocks, with a group of blocks making up a district or a neighborhood. Most developments are joint ventures between private and government capital, with private capital being much larger than government investment. The Asian cases demonstrate the strong role of government in deciding where the MPCs will be built, and how they fit into an overall scheme to provide housing for expanding urban populations. Sometimes, the government will change its own policy in order to promote the project. In Vietnam, the government changed land tenure rules to allow for long term land leases to residential and commercial uses that allowed foreign participation.

## BRAZILIAN CASE

For the Brazilian case, on the outskirts of Belo Horizonte, the 7,900 acre master planned community replicates that of a US project with the use of strong separation of land uses, and gated communities. The project uses phases focused around a central water element. Each phase will have its own separating walls. There is a significant effort to design in the development elements that support middle-class values and life styles and desire to live in less a less crowded environment than the large city. A private school was established early in the project, as well as a business park, creating elements of community life at the outset. The Brazilian case is a private project, by a company that develops this type of community in other parts of the country. The infrastructure financing is provided through pre-development lot sales.

## SPANISH CASE

Tres Cantos, located at the edge of the Madrid Metropolitan area, is Spain's only new town project. It began in the late 1970's as a means to accommodate urban growth in the



Figure 4. Aerial view of the commercial center in Lagoa dos Ingleses, Brazil (photo: The SWA Group).

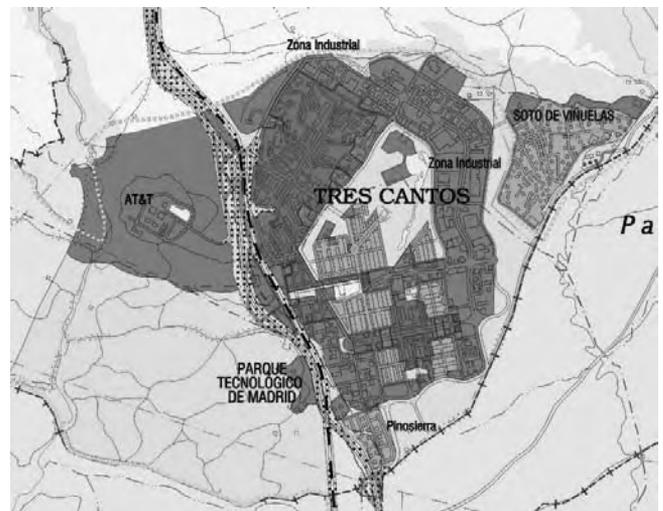


Figure 5. Land use map of, Tres Cantos, Spain.

region. Originally planned for 150,000 people, it has been scaled back to 40,000 people, living in primarily six story apartment towers, and a lesser number of townhouses. The initial operating company was a special public corporation that developed and sold land. Tres Cantos is now an independent city with the metropolitan area and the town council controls land use. There are 40,000 jobs located in different technical, industrial, and office parks zone where many foreign companies have operations. The principle urban design concept is locating development in sectors. In these sectors are apartment buildings of 6-8 stories and



Figure 6. Multi-story Apartments in Tres Cantos, Spain.

associated a variety of services. The industrial parks are located in three parts of the city. And there is a big park in the centre of the city. The city is connected to metropolitan Madrid by public transport, train and coach, and a large divided main highway.

## CONCLUSION

Contemporary MPCs are “semi-new towns”, providing many elements that people desire in a non-center city location. Their location, not too far away from a major metropolitan area, allows them to develop a distinct life-style of that is in contrast to the older more “urban” areas. There is a real “new versus old” appeal in them. As MPCs develop and mature overtime, problems of early design flaws, changing tastes, and “middle-age” creeps in. They are challenged to make adjustments to new requirements. Progressive MPC developers such as the Irvine company organize themselves to respond to change in land use design and in product mix.

MPC design themes and implementation strategies vary around the globe. In the United States MPC’s are lower density, use a horizontal approach and provide a wide mix of housing tenure choice, while the Asian MPCs are denser, use a vertical approach and focus on apartments and condominiums. This is due in part to land availability, government control, and infrastructure costs. In the US infrastructure costs are passed on to the local residents through various funding mechanisms and resident associations.

The defining feature of contemporary MPCs is the focus on building a sense of “community” for the residents. Although some MPCs may function like a bedroom suburb the developers goal is for them to become the place “of choice” for the residents and employers over the long term. The continued use of the “village” as a defining unit of urban design also tells us that Ebenezer Howard was on the right track in his search for the “Garden City of Tomorrow”.