Choose always the way that seems the best, however rough it may be; custom will soon render it easy and agreeable.
—Pythagoras

The general conclusion to be learned from the trends reviewed in Chapter 14 show that the Regional District is growing rapidly in all respects; and so are its needs. And plan for the area must satisfy these needs.

Not only the trends, but also the goals described in Chapter 1, provide the yardstick for judging the desirability and adequacy of alternative plans for development of the Regional District. It is the purpose of this Chapter to present and analyze the four major patterns in which this development could take place. The corridor pattern was finally chosen as the basis for this General Plan, but only after careful comparison with the three alternative patterns known as Sprawl, Average Density, and Satellite.
Under the sprawl pattern of development, new growth would follow its present trend of expanding outward in all directions at low densities, seeking always the lowest priced land. Sprawl takes place naturally in the absence of energetic and coordinated public policies to guide new growth. The problems that have been created by sprawl in the past would be magnified in the future if this pattern is allowed to continue.

Sprawl is characterized by scattered urban development, "septic villages" without adequate public facilities, unpredictable demands for service which can only be met by catching-up after a period of inadequacy, increased costs for public services, and the dominance of private automobiles. As a result taxes continue to go up; rush-hour traffic gets worse; public transportation is too slow and infrequent; living environments become inconvenient and less pleasing than they should be. Knowing what development will occur at any particular time and location is impossible.

Sprawl takes place in a series of hops, skips, and jumps leaving large amounts of undeveloped land between fully developed subdivisions. Emphasis at first is on single-family housing occupying low cost land, but the value of by-passed land rises, often to the point where it is no longer available for single-family use. Real estate taxes based upon the vacant condition of land, instead of its value for uses allowed under existing zoning, encourage owners to hold on and seek more intensive zoning later. The inflated price of by-passed land is very often used to justify zoning changes contrary to public plans and the established character of the neighborhood. In this way individual land owners play the dominant role in determining the location of shopping centers, employment centers, and apartment projects. Community-wide planning tends to give way to individual initiative and the largely unrestricted forces of the real estate market. Thus the community ends up with development contrary to the convenient and harmonious plan it set out to follow. Sprawl is largely the result of permissive and even passive planning—planning by reaction rather than by initiation of positive public policies.

More than anything else, past experience with sprawl demonstrates that a more compact and stable form of development is necessary to satisfy the goals that should guide future development in the Regional District.
sprawl pattern

- High Density
- Medium Density
- Low Density
- Permanent Open Space
In 1960 the Commission published and held public hearings on *A Preliminary Master Plan of Residential Land Use*. Although this plan was not adopted, it has been used as the basis for the average density development pattern. The term "average density" refers to the way in which the *Residential Land Use Plan* proposed various average residential densities for all parts of the Regional District, neighborhood by neighborhood, consistent with the need for urban land, the existing character of development, and topographic conditions influencing extensions of the gravity sewer system.

As an alternative to unlimited sprawl the average density development pattern might be characterized as controlled sprawl. The 1960 plan showed for the first time that much of the rural land in Montgomery and Prince George's Counties would not be needed for urbanization many years hence, even with a continuation of suburban building for relatively low numbers of families per acre. It attempted to set a pattern of urban concentration which would protect the rural areas from scattered urbanization; and it proposed that the natural tendency toward uniform and monotonous expansion of the suburbs be broken up and given variety by alternating areas of high and low densities. Limited use of rapid transit was proposed, but highway transportation was primarily relied upon. Although urban residences were clustered most heavily along major radial freeway and highway routes, there were for the most part no clear boundaries separating urban and rural areas. Finally, Germantown and Levittown were proposed as separate towns of moderate size outside the solidly urbanized area.

The average density development pattern is therefore an evolutionary stage between uncontrolled sprawl and the highly compact satellite and corridor patterns. It shows moderate urban concentration in a fuzzy corridor pattern with two rudimentary satellite cities beyond.
average density pattern
A satellite pattern of development would put much of the new urban growth into brand new cities some distance outside the presently urbanized area and separated from it by permanently rural country-side. The advantage of this pattern is that it would prevent the ceaseless urban expansion that so often engulfs everything in its path and leaves little if any large-scale open space within easy range of most urbanites. Occupants of a satellite city would have the further advantage of not feeling so lost in the mass; they would be encouraged to develop a feeling of identity with their separate satellite communities.

The specific satellite pattern shown here for the Regional District has five new cities of about 100,000 persons each. These new cities would have important advantages of unified and pleasant community design providing wide ranges of living environments and job opportunities. But they would still be considerably dependent upon the central city of Washington. Therefore, an efficient system of transportation including both freeways and rapid transit would be required. Recognizing this, the proposed satellites were located along the four radial freeway and rapid transit routes.

The Satellite pattern's biggest advantage, large expanses of open space on all sides, is also its biggest disadvantage. It increases the length of travel to the central city and it presents insurmountable problems of open space protection. The pressures for urbanization along the radial transportation routes between the satellites and the central city would be extremely difficult to withstand short of large scale public land purchasing.
satellite pattern
Like the satellite pattern, the corridor plan concentrates new urbanization in well defined areas separated from the rural countryside. The chief difference is that the corridor pattern pulls the satellites closer together along the four major transportation routes. In this way, the corridor pattern retains the advantages of concentrated and well organized urbanization without trying to retain large open spaces along the corridor axis between centers of population. Thus, transportation to the central city is facilitated while implementation problems are reduced.

The new corridor cities with about 100,000 people each will provide convenient services, pleasant living conditions and wide ranges of choice among housing types and job opportunities. Additional services and choices will be available along the radial transportation routes centering on downtown Washington where the greatest number of employment, business and social opportunities concentrate. The need for circumferential travel between corridors will be restricted largely to limited access beltways.

Efficient rapid transit depends upon relatively few highly traveled routes supported by closeness of residences and businesses to its stations, frequent service, fast and comfortable equipment. It is only under these conditions, found in the corridor pattern and to a somewhat lesser extent in the satellite pattern, that rapid transit will be attractive to a large enough number of people so that the insatiable need for highways and freeways can be brought under control.
corridor pattern
In weighing the advantages and disadvantages of these four alternative patterns of development it is best to compare them directly with each other in terms of whether they would help or hinder achievement of the goals set forth in Chapter 1.

The aimless, scattered pattern of sprawl, with its extravagant leap-frogging and overemphasis on larger and larger residential lots, obviously hinders the efficient use of land. The average density pattern might be called neutral in achieving the goal of efficient land use, since it reduces aimless scattering, but it does not encourage and could not accommodate high density commercial and residential areas such as those which would be built in the cores of new corridor or satellite cities. Both the satellite and corridor patterns make positive contributions toward achieving the efficient use of land.

The sprawl pattern, with its traditional over-zoning and leap-frogging, is diametrically opposed to the achievement of this goal. The satellite pattern is not haphazard, but in its effort to separate new cities from the old, it contains both an element of leap-frogging, and a built-in threat of unplanned urbanization in the open space along the connecting transportation routes. The average density and corridor patterns extend previously developed areas in sequence and would therefore assist orderly conversion. Break-throughs of unplanned development into rural areas are least likely to occur in these two patterns.
Sprawl's haphazard invasion of rural areas disrupts the rural environment and intrudes upon activities such as quarrying which become obnoxious in close quarters. Septic villages and disruption of storm run-off may occur under sprawl with too little warning for adequate watershed protection measures to be taken. Thus, both the lack of predictability and the wasteful use of land contribute to the tendency of sprawl to work against natural resource protection. By contrast, the concentration of urban uses and their predictable locations are characteristics of the other three patterns quite advantageous to conservation and rural development programs.

Again the scattered pattern of sprawl works against the goal. An urban house, even a whole urban subdivision, may spring up almost anywhere under the sprawl pattern. Houses may line the rural highways giving the impression that an area is heavily developed while in reality only a small proportion is actually urbanized. The average density pattern would cut up open space into relatively small and unusable pieces by alternating large and small lot areas instead of consolidating residential areas and separating them from rural areas. Satellite and corridor patterns propose preservation of the largest possible rural open spaces within easy reach of most urban areas.

All four patterns of development would allow expansions of public park systems. But since an adequate expansion of outdoor recreation opportunities must rely to a great extent on private rural land, it must rely upon the protection and enhancement of rural areas. Here again sprawl is least adequate; average density is somewhere between; satellite and corridor patterns are most adequate.
FACILITATE THE ORDERLY AND EFFICIENT ARRANGEMENT OF PUBLIC UTILITIES AND SERVICES.

PROVIDE AN EFFICIENT SYSTEM OF TRANSPORTATION INCLUDING RAPID TRANSIT.
ENCOURAGE GREATER VARIETY OF LIVING ENVIRONMENTS.

INVITE IMAGINATIVE URBAN DESIGN.

ASSURE IMPLEMENTATION OF THE PLAN:
Summarizing the advantages and disadvantages of the four alternative development patterns in terms of the ten goals, the corridor pattern rates highest overall, with satellite second, average density third, and sprawl a poor fourth. The satellite pattern would have rated nearly as high as the corridor except that it was more expensive and harder to implement. The average density pattern has several advantages but they are offset by disadvantages. Sprawl's only advantage is its ease of implementation.