

# EFFECTS AND COSTS OF SPRAWL



## Appendix B

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The problems with sprawl can be summarized under two categories:

- A. Sprawl is expensive.
- B. Sprawl decreases the region's quality of life.

#### A. SPRAWL IS EXPENSIVE

Sprawl is more expensive than alternative patterns of development. The following costs are the direct result of sprawl and would be avoided by using an alternative development form.

#### COSTS TO THE TAXPAYERS

##### *Building and maintaining highways.*

Highways built to support inefficient development patterns place an avoidable burden on public finances. Every dollar wasted on poorly planned roads that service sprawling subdivisions could have been spent on schools, parks, libraries, shade trees along sidewalks, public art, public transit or it could have simply been returned to the taxpayers in the form of lower taxes.

##### *Building poorly located schools and transporting children to class.*

The poor layout of sprawl subdivisions increases transportation costs, as longer and less direct routes are necessary. In addition, children who could walk to school in a well-planned neighborhoods are unable to reach schools located within sprawl projects. Many times, there are no sidewalks or bike lanes. Often, traffic conditions (also a result of the poor design of sprawl projects) are unsafe. Therefore, more children must be bused longer distances, an expense that if prevented could be allocated to other educational activities.

##### *Costs of social problems resulting from neglected or abandoned neighborhoods.*

Sprawl may not cause social problems, but it does aggravate them.

##### *Environmental costs.*

Sprawl causes the unnecessary destruction of the natural environment. The destruction of wetlands and uplands that serve as habitat to endangered species has an effect on the quality of life of the region. The destruction of land that recharges the aquifers affects the region's ability to sustain a high quality, affordable water supply.

## COSTS TO BUSINESSES

### *Sprawl makes the Region less desirable.*

The business climate is affected by the physical development of an area. When an area is poorly planned, it is less attractive to investors. In addition to taking into account direct costs, businesses relocate to areas that provide a good quality of life to employees. Sprawl may compete by providing less expensive land, but that is insufficient to attract quality businesses to an area.

### *Increase of direct business costs.*

The mismatch of land uses and long distances increase transportation costs.

### *High labor costs*

Jobs and workers are not close to each other. This is a particularly difficult problem for low skill service jobs in suburbia. The people who want those jobs live somewhere else and often cannot afford the transportation costs to get to the jobs.

### *Waste of investment in older areas*

Public investments in utilities and water and sewer are underused. Private investments in older areas are abandoned.

## COST TO SUBURBAN RESIDENTS

### *Cost of car use and ownership.*

Multiple car ownership is an avoidable expense. The absolute need of an automobile for every trip (job, school, grocery store, movies, visit of friends, etc.) is a direct result of sprawl. Two and three car families are the norm. Such an extraordinary expense affects the affordability of housing.

### *Costs of new infrastructure*

Sprawl requires new roads, water, sewer, power lines, etc. As concluded in several analyses, (RECC 1974, Roberts 1979, Frank 1989, Duncan et. al, 1989 and Burchell, 1992), and confirmed by more recent experience in a number of communities, there are substantial differences in infrastructure costs between “compact” and “sprawl” development patterns, with more compact higher-density development resulting in an overall cost reduction of as much as 44 to 50 percent. Most of those costs are passed on to the house buyer, decreasing the affordability of housing by keeping taxes high. Still, most residential projects do not pay their own costs. Impact fees are kept artificially low, and taxes from non-residential projects are used to help offset some of the infrastructure costs.

## COSTS TO RESIDENTS OF OLDER NEIGHBORHOODS

### *Loss of jobs*

Downtown employers move out, as it becomes increasingly difficult to compete with sprawl locations. Jobs relocate far away from housing, increasing costs for every one.

### *Loss of economic stability*

When sprawl competes unfairly with older neighborhoods, long time businesses close and unemployed workers relocate. These effects accelerate the decline of established cities.

### *Waste of existing infrastructure*

When existing infrastructure is underused, it becomes more expensive to maintain. Some times, maintenance is deferred, which compounds the decay over time. As downtowns sit empty, new infrastructure continues to be built to service sprawl projects.

## COSTS TO AGRICULTURE

### *Loss of land*

Sprawl consumes enormous quantities of land. This is inevitable because the primary amenities a sprawl project delivers are land and low densities. Neighborhoods, on the other hand, deliver complete communities and do not need as much land. If sprawl is unchecked, excessive amounts of land are developed for suburban uses and less land remains for agriculture.

### *Loss in productivity*

As sprawl appears next to agricultural fields, normal farming practices are affected. For example, sprawl residents often object to the spraying of groves adjacent to their property.

### *Loss of water*

Sprawl projects consume water in locations where it could be used for agriculture or for natural systems.

### *Long-term uncertainty*

The random conversion of agricultural land to sprawl projects affects agriculture.

## COSTS TO THE ENVIRONMENT

### *Loss of land*

As development impacts compound, new sprawl projects require increasing amounts of land to preserve a suburban life style. For example, in development that follows a sprawling pattern, lower housing densities translate into lesser traffic impacts. Therefore, in order to meet concurrency requirements, more and more land is needed to accommodate people at increasingly lower densities.

### *Pollution of air*

Sprawl maximizes automobile dependence. Currently, more than half of the air pollution of the Region comes from cars. The inefficient layout of sprawl projects make residents drive longer distances more often.

### *Waste of water*

Unless special open space and landscaping procedures are utilized, sprawling development consumes a great deal of water. If large lawn areas are utilized in yards, rights-of-way, median areas, etc., a great deal of water is necessary for irrigation.

### *Waste of energy*

Sprawl maximizes auto dependency, increases trip length, severely limits public transit options, and increases vehicle miles traveled in the Region. Compact urban forms of development are 30 percent more energy efficient over the long term than sprawling patterns of development. The United States consumes more petroleum for transportation alone than it produces in total. This increases the Region's vulnerability to fuel price increases and supply interruptions. It also assures that the security of United States oil imports will continue to require political and military expenditures.

## B. SPRAWL DEGRADES THE REGION'S QUALITY OF LIFE

### EFFECTS ON CHILDREN

#### *Children must be driven everywhere.*

A child's life is severely limited in a sprawl area. Most of the time, he cannot go to school, library, park, visit friends, etc. by himself. This creates an uncomfortable dependency that is disliked by the child and by the driver, who is often a working parent.

#### *Busing*

Because sprawl does not create complete communities, children must be bused to distant schools. Busing severs friendships (children who live in close proximity to each other are often bused to different schools) impedes after school activities (children cannot miss the bus) and disconnects parents from the educational process (schools are large bureaucratic establishments located far away from a neighborhood).

In addition, busing wastes the children's time. During the average school year (180 days) a child who spends one hour in a bus to go to school and one hour to return (not unusual times, taking into account that the bus must make several stops along the way) will spend 360 hours or 45 eight hour days on the bus. Assuming the child is bused for 12 years, the total amount of time wasted in a bus will be 4,320 hours or about 1.5 years of eight-hour days. Those wasted 4,000 hours occur at prime times: early in the morning, when parents are home and could interact with the child, and early in the afternoon, when the child could expand his school day with extracurricular activities.

The social problems busing attempts to correct are directly traceable to sprawl. Generally, children who live in stable urban areas are not bused as much because their neighborhoods tend to be more balanced racially.

#### EFFECTS ON THE ELDERLY

##### *Older people must drive.*

Life in sprawl is unthinkable without a car. When people retire, many are sufficiently young and healthy to function in sprawl. As their strength and eye sight weaken, they must hold to their driving license as long as they can. Once they are unable to drive, their quality of life plummets. As there is no public transportation, moving around becomes a major ordeal. This is a serious problem in the Region: about 30 percent of the population in the region is at least 60 years old and 28, 800 people were over 85 in 1993.

##### *Older people must move to other types of communities.*

When older people cannot drive, they must move. This can have a devastating effect on their quality of life.

#### EFFECTS ON GENERAL POPULATION

##### *Waste of valuable time during commute and errands.*

The time before and after business hours is very valuable for a family. That is when children are at home (only the very young, school-age children are on the bus) . That is when parents are in their cars, commuting to work or running errands. The loss of several hours a week of interaction with children is a direct consequence of poor planning.

#### EFFECTS ON EXISTING CITIES, TOWNS AND VILLAGES

##### *Sprawl kills older urban cores.*

Sprawl has contributed to the decline of urban America. Towns have always been complex entities which included a variety of land uses: houses, stores, offices, schools, civic buildings, churches, apartments above the store, small inns, restaurants, parks and squares, etc. Sprawl breaks apart the town's components and optimizes those that are most profitable. Public and civic uses become superfluous, and design options only follow business criteria. Sprawl competes on unequal terms, destroys the town and delivers a vastly inferior product.

#### EFFECTS ON SUBURBIA

##### *Sprawl destroys the suburban ideal.*

Suburbia enjoyed a long history before it was overtaken by sprawl. Originally, suburbs were designed as complete neighborhoods (Forest Hills, NY, Camden Hill, NJ, Coral Gables, FL, etc.). Those early suburban projects are desirable places to live that function efficiently. Sprawl is very different.

*Sprawl creates slums.*

Although urban decay is generally associated with the older cities, suburbia is beginning to show similar effects. Abandoned shopping centers and unkempt vacant single family houses are typical conditions within older sprawl projects.

*Sprawl makes siting “locally unpopular land use” (e.g., landfills, major electrical utility transmission lines, recycling facilities, etc.) unpopular and more difficult .*

Sprawl consumes excessively large amounts of land, spread out over vast areas, and creates no clear division or break between “town” and “country”. Locally unpopular land uses (LULUS) are often best relegated to sites that are away from people. Because sprawling patterns of development scatter people across the countryside and often unnecessarily leap into unpopulated rural areas, LULU sites are becoming increasingly difficult and expensive to find. As a result, LULUS often have to be sited at less than ideal locations which either impact the quality of life of existing residents or increase the cost to provide services.