ECONOMIC IMPACT OF FREEWAY BYPASS ROUTES IN MEDIUM SIZE CITIES

by Margaret Collins and Glen Weisbrod
Economic Development Research Group

September 2000

This document is excerpted from the report: Economic Impact of I-73 Alignments on Roanoke, Prepared by Economic Development Research Group for the City of Roanoke (Virginia), Dept. of Economic Development, February 2000.

❖ 1 Overview

Analysis. One basis for assessing potential impacts of city center vs. outer belt options is to consider the experience of other, similarly-sized cities that have had interstate highways bypassing the city's downtown area. Accordingly, the consulting team conducted case studies of the effects of new interstate highways bypassing downtowns in four cities – Danville (IL), Richmond (VA) Fort Wayne (IN), and Appleton (WI).

Summary of Findings. The wide range of highway bypass studies carried out around the country provides a generally consistent story. They indicate new highways bypassing the central business district of a community are seldom either devastating or the savior of the area. The locational shift in traffic can cause some existing businesses to close up or relocate, but it can also create some new business opportunities. Net economic impacts on the broader community are usually relatively small (positive or negative). Downtown business districts having a strong identity as a destination for visitors or for local shoppers are the ones most likely to be strengthened due to the reduction in traffic delays through their centers. However, there is also a broad perception that adequate signage to the bypassed business center is an important need (and concern) for ensuring its continued success.

Across the case studies, some positive and negative factors are common. The positive benefits of bypassing downtown areas commonly include the removal of heavy truck traffic from central areas and the opening up of additional industrial sites along the new route, thus attracting new investment from outside of the region. The negative impacts include increases in sprawled, low density commercial and residential development entailing high environmental and infrastructure costs.

Other findings are as follows:

- Bypasses do not necessarily result in a reduction in total traffic volume in the downtown area. Often, the removal of most truck movements and other pass-through highway traffic encourages more local traffic, which had previously avoided the downtown area due to heavy traffic. The result is often little or no change in total traffic levels, which is often associated with improved travel opportunities for local residents and access for downtown businesses.

- Even in cases in which bypasses have a limited impact on redirecting traffic, development and economic impacts can be profound. Bypasses designed to serve local traffic can have a significant impact on the development and location of retailing and local services. But generally, retailers will locate only in areas with an existing population base.

- A new bypass route without supporting infrastructure seldom ignites a development explosion. In the absence of water and sewer services, local interchanges and local access roads, bypasses around small cities usually do not facilitate sprawled development in outlying areas. In the longer term, outer-beltway bypasses can be expected to have profound effects on development patterns, but in smaller cities this impact could take 20 or more years.

- A new interstate highway corridor can open up sites for industrial development to attract investment from outside of the region. Proactive planning by local authorities can catalyze industrial development in the vicinity of interchanges. Regional planning controls can be important to prevent sprawl and over-development of retail space, although in practice such controls require significant effort and are not always in place. In cases where a bypass goes through several jurisdictions, there is likely to be competition for tax-producing retail and other commercial businesses.

- Downtown areas hard-hit by the proliferation of shopping malls of the 1970's and 1980's are likely to have already restructured away from consumer retailing to new roles as office, financial, health and entertainment centers even before they were bypassed by more recent highway improvements. In response to those changes, city centers have become increasingly specialized centers for institutions and the service sector of the economy.

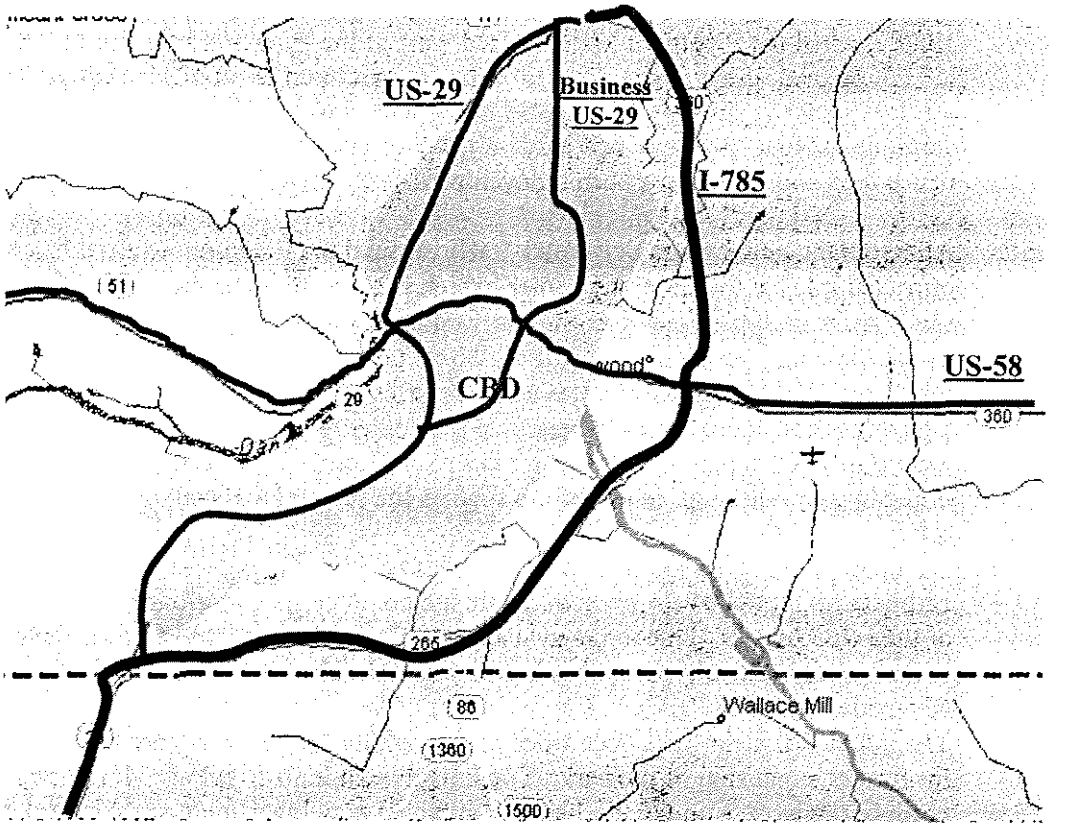
- Outer beltways entail both benefits and costs for inner cities. Cities cannot always compete with open space ("green field") sites for new industrial and commercial development when those businesses are seeking large lots. Cities must continue to reinvest in and upgrade their infrastructure and buildings to continue to attract new industrial, office and commercial development.

The detailed case study reports are presented on the following pages.

❖ 2 Danville, VA: I-785 Bypass

Project and Setting. Danville, located in south central Virginia at the North Carolina border, is a city of 53,000 within a metropolitan area of 108,000 people. Until construction of the I-785 bypass in 1997, traffic traveling north and south on Interstate 29 was routed through the city along "Business 29", a four lane road with stop lights at major intersections. The I-785 bypass, which is 3 - 4 miles from the previous route, has six interchanges.

Planning for the I-785 Bypass began in the 1960's but construction did not start until the late 1980's. The road is being developed in three phases. Phase I, completed in 1990, connects US 29 south of the city with US 58 east of the city. It bypasses Business 29, where traffic serving retail and service businesses traditionally clustered. Phase II, completed in 1997, connects US 58 east of the city with US-29 north of the city. Phase III, now underway, is a seven-mile stretch connecting US 29 south of the city with US 58 west of the city. The new system is intended to serve as a spur from I-85, spanning a 46 mile stretch from Greensboro, North Carolina to Danville.



Economy. Like Roanoke, Danville, is a regional center for a large rural area. Danville does not compete with nearby municipalities for development. The metro area's 108,000 population has been relatively stable and is projected to be growing at a rate of less than 1% a year.

Based on recent labor force data, jobs in Danville are considered to be growing somewhat faster than the population. Danville's economy is heavily dependent on manufacturing. Textiles and tobacco are the traditional dominant industries, but the manufacturing base has been diversified in recent years with the attraction of food processing, building materials, and auto-related manufacturing. Forty-five percent of the workers are engaged in manufacturing compared with just 12% statewide and 9% in Roanoke.

Impacts on Existing Business. The bypass has not resulted in a decrease in traffic on Business 29, as was feared, but has resulted in a significant drop in the number of trucks. The lack of decline in traffic on Business 29 is due to an increase in local vehicles, which had previously avoided the route due to heavy truck traffic. There is no evidence of negative impacts on business there.

The downtown area has similarly not suffered any negative impact to date from the bypass. A massive exodus of retailers from the city center occurred during the early 1980's, when the Piedmont Mall, located west of the bypassed junction of US 58 and US 29, opened. Since then, downtown has restructured as an office center. The legal services sector is strongly represented along with finance, insurance, and communications. A number of old retail anchor buildings have been converted to office uses and some have been redeveloped.

Although the new bypass does route traffic around the Piedmont Mall, it has not impacted sales at the shopping center, which is currently expanding with new retail space and a multiplex cinema. Similarly, another major retail development, Cain Creek Shopping center, a locus for big box retailers located just east of the bypassed junction of US 58 and US 29, has not been affected by I-785. In fact, the new highway is considered to have benefited the center, presumably by encouraging more local traffic. Occupancy at the center has risen from 90% to 100% since completion of the bypass, although other factors such as the strong local economy, also played a role.

Impacts on New Development. There are six interchanges along the 25-mile stretch of the I-785 bypass. Due to the availability of serviced sites, most of the development in the vicinity of the bypasses has been industrial. The city has established the Riverside Industrial Park at a site just south of the junction of the bypass and US 58. The initial 170 acres have been filled and an additional 180 acres are being developed for further expansion of the park. The Pittsylvania Industrial Park, developed just north of the bypass on US 29, has also attracted new investment since completion of the bypass in 1997. Dan River Industries, a local textile manufacturer who expanded into the Riverside Industrial Park, was retained in the community although most of

the other industries have come in from outside of the area. The bypass is considered to have had a major impact on bringing about this investment.

Retail development has been limited to a few gas stations, convenience stores, and fast food restaurants. No major retail development has yet been spawned at or near bypass interchanges. A few new apartments have been developed on the North side of US 58 near the airport but there has been no significant residential development. Some hotel developers are rumored to be looking at interchange sites, but nothing concrete has transpired.

The city has not undertaken any measures to discourage sprawl development in the vicinity of the bypass interchanges. Since the bypass is within the city limits, they believe that any development in the area -- which is zoned for a mix of commercial, residential, and industrial uses -- would be of benefit. Lack of development is due to the lack of water and sewer infrastructure at (all but industrial) sites near the bypass. The city has insufficient resources to provide additional infrastructure. The hottest development area is along Piedmont Drive, a new four-lane road just northwest of the bypassed junction of US 29 and US 58, where big box retail, restaurants, and cinemas have clustered around new residential developments. This area has the water and sewer infrastructure needed to support development.

Conclusions & Lessons Leaned. Overall, the I-785 bypass is regarded as having had a positive impact on the city in two main respects:

- The bypass has catalyzed development of industrial sites located near the interchanges. Jobs generated by this development have supported expansion of existing shopping centers, which were actually bypassed by the highway improvements.

- The bypass has removed truck traffic from the city's main business artery. This loss has been offset by a growth in local passenger traffic, benefiting the traffic-serving businesses clustered along Business 29.

The case of Danville represents potential short-term impacts of a bypass on a small city in a relatively isolated location serving a large rural hinterland. The following lessons emerge:

- Bypasses do not necessarily result in a reduction in traffic since more local traffic may be encouraged to use a route previously avoided due to heavy truck traffic.

- Downtown areas hard-hit by the proliferation of shopping malls of the 1970's and 1980's are likely to have restructured away from retailing to new roles as office and entertainment centers before they were bypassed by more recent highway improvements.

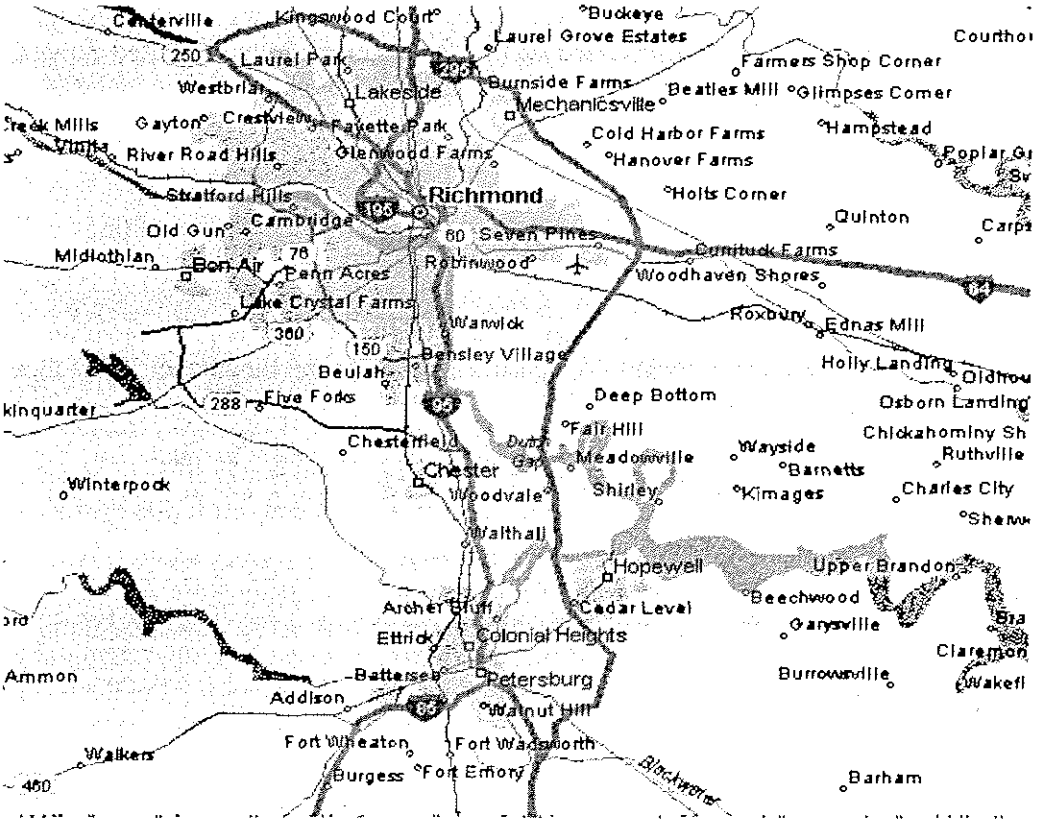
- Proactive planning by local authorities can catalyze industrial development in the vicinity of bypass interchanges.

- In the absence of water and sewer services, small town bypasses alone are unlikely to facilitate sprawl development. However, in the longer term, sprawl may be facilitated if funding is provided for water and sewer.

- In cases where bypasses are within city limits, cities are less likely to be concerned about impacts on existing development.

❖ 3 Richmond, VA: I-295 Bypass

Project and Setting. The capital city of Richmond, with 192,000 residents, lies at the core of the Greater Richmond Metropolitan area. The I-295 Bypass connects Interstates 95 and 64, forming three-quarters of a loop around the city of Richmond. The bypass was undertaken in three phases. Phase I, the southeastern quadrant, was completed in the early 1980's. Phase 2, which forms the Northeast quarter of the loop, was finished in the mid-1980's. The final phase of the loop, stretching from I-95 north to I-64 west was finished in 1990. The 30-mile bypass has 18 interchanges. It most closely resembles the eastern bypass option for I-73 in Roanoke. The bypass, which lies 6 to 10 miles from the center of Richmond, is outside of the city limits in the surrounding counties of Price George, Charles City, Henrico, Bedford, and Goochland Counties.



Population & Economy. The population of the Greater Richmond metro area, which now stands at nearly 950,000, has been expanding at an average annual rate of 1.5% since 1980. The city, whose population has declined by nearly 1% a year over this period, represents a shrinking share of the metro area total – currently some 23% compared with 35% in 1980.

The number of jobs in the MSA has grown by 12% to 525,000 since 1990. The dominant industries are chemicals, printing, business services, and back office financial services. Like its population, the city's share of the region's jobs is declining both proportionally and in real terms. Since 1990, the number of jobs in the city declined by 10 % while jobs in the suburbs have increased by 27%. The city's share of MSA jobs, some 40% in 1990, had declined to one-third by 1998.

Downtown Richmond has a high proportion of government employment and a relatively strong financial sector. Tourism is developing, as is the institutional sector with the expansion of the downtown campus of the Medical College of Virginia. It is generally agreed that the city has "turned the corner" since the recession years of the early 1990's and is beginning to adapt to a new, more specialized role as an institutional, financial, tourist, and entertainment center.

Impacts on Traffic. The I-295 Bypass has not resulted in any decreases on I-95, which is still the main route for non-local traffic going North and South. The bypass carries less than 20% of the total traffic. Nearly equal proportions of trucks use the new bypass and the original route. Three main factors explain this:

Prior to opening the bypass, I-95 was a toll road. Due to fears of loss of traffic to the bypass, tolls were dropped from the old route when the bypass opened. This change apparently encouraged more local traffic on the original route.

The old I-95 route retained the official name of the highway, which has encouraged some of the passing trade to stay on the old route. Tourism and recreation opportunities in the inner city are clearly sign-posted, a fact that has probably stimulated tourism.

Although the speed limit is 10 mph lower in the old route, I-95 is still the shortest route in mileage. The fact that the new bypass is 7 miles longer than the old route is a key factor for many truckers, because trucks are compensated based on the shortest distance between pickup and delivery.

Overall growth in traffic has been an additional factor in maintaining the previous level of traffic on I-95. Currently, about 120,000 vehicles a day use the old I-95 route, while only 20,000 use the new outer belt. About 10% of vehicles on both routes are trucks.

Impact on Development in the Suburbs. The main impacts of the I-295 bypass have been in opening sites for development in the suburban ring. In this way, it has

been typical of real estate markets in larger cities responding to new opportunities posed by outer beltways, particularly at interchanges where two major highways intersect.

Considerable industrial development has occurred along the northern arc of I-295. The White Oak semi-conductor plant, a joint venture between Motorola and Siemens has located in Eastern Henrico County, near the junction of the bypass and I-64 east, near the airport. Another Motorola plant is planned on the west side, near the junction of I-64 and the bypass. These two investments have drawn a number of semi-conductor vendors to the White Oak Industrial Park on I-295. A new 1000 acre Metalview Industrial Park on I-295 South in Chester is now being developed. Next door is the Riverbend Office park, a mixed-use office, industrial, and residential golf course community.

Four major regional shopping malls have located near interchanges along 295. Another large new upscale mall is planned near the intersection of I-64 and I-295. Hotels have developed on the south end of the interchange in Chester County and near the airport, at the eastern end of 295 near the junction with I-64. Also near the airport is the site of a major investment from outside the region – the corporate headquarters of Lavetee Shampoo Inc. I-295 has strengthened the airport by making it more accessible to the smaller towns to the north and south of the Richmond MSA.

Most of the residential development has been in the northwestern segment of the 295 arc, in Eastern Henrico County, where water and sewer are available. The Wyndam residential development near the Innsbruck Office park in the northwestern suburbs, with several thousand acres, is the largest. The abutting, largely-rural Hanover County, where water and sewer are currently more limited, is expected to be the focus of future housing development.

Impacts on Development in the City. As previously noted, the city has been losing population and jobs to the suburbs since construction of the bypass began in the early 1980's. The city now has 23 % of the region's population and 35% of its jobs, compared with 25% and 40% respectively in 1990. A number of major employers, including the Richmond Times Dispatch and Bonsecouer Hospital, with 1500 jobs have expanded to locations on I-295. Other expanding manufacturing plants, such as the shopping cart maker Rehig, have moved to the outer belt. But a growing number of new, smaller firms have absorbed inner city sites vacated by expanding industries. One such operation is a $50 million switching station developed by Cavalier Telecom, employing 200.

Downtown Richmond lost two major department anchor stores in 1992, shortly after the bypass was constructed and malls along I-295 began to open. Downtown retailing is now limited to a few specialty stores, but the downtown office market, with a vacancy rate of 8%, is relatively healthy. Growth in state and local government employment has absorbed some of the available commercial space. The downtown

campus of the Medical College of Virginia has spawned the development of a biotech park, demonstrating the city center's resilience in adapting to new circumstances.

Tourism in downtown is accelerating with the expansion of the Convention Center and the opening of the Canal Walkway. The institutional sector has expanded to absorb some of the sites abandoned by retailers. Inner city residential development is picking up; 1000 units of housing will be renovated this year.

Conclusions. At the regional level, the bypass has spurred economic growth by providing access to sites for high technology and consumer products industries from outside of the region. Without the new outer loop, these investments may not have occurred due to the lack of sites along the existing interstate network. However, relocations of retailing, local industries, offices, and residents facilitated by the outer belt have weakened the city's downtown business district. This drop has been partially offset by increased demand for center city services, restaurants, and entertainment establishments. Without the bypass, local planners agree there would have likely been more redevelopment at high densities in the downtown area. However, they also agree that the inner city has and will continue to adapt to new roles. While the I-295 bypass has attracted some investment away, there have been benefits. On balance, the impact of the bypass on the city is generally perceived to be neutral.

Lessons Learned. The following lessons emerge from this case:

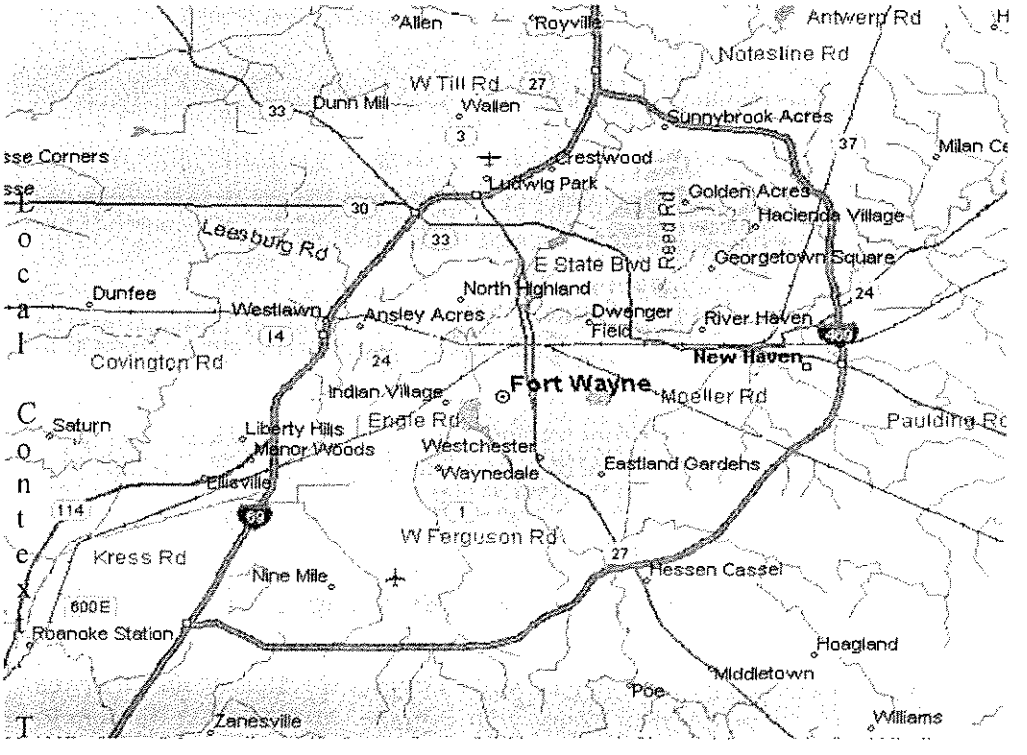
- If a bypass lengthens a journey, many long-distance travelers may choose the old route, particularly trucks.
- Even in cases in which bypasses have a limited impact on redirecting traffic, development and economic impacts can be profound.
- "Greenfield" sites having easy accessibility to water and sewer services will be most likely to be developed for industrial, commercial, and residential uses after construction of an outer beltway -- in the absence of land use controls.
- Inner cities cannot always compete with outlying "greenfield" sites for new industrial, commercial, and residential development, but can strive to seek new roles as centers of tourism, entertainment, and institutions.

❖ 4 Fort Wayne, Indiana: I-469 Bypass

Project and Setting. Fort Wayne's I-469 bypass was finished just four years ago. It replaced an old inner-urban bypass with at-grade intersections (Coliseum Road), extending from US 33 on the northwest to US 14 on the city's west side to connect the spokes of radial state highways transgressing the metro area.

The new bypass is outside of the city limits, in unincorporated districts within Allen County. At the time of planning for the bypass, concern was expressed by businesses both in the downtown area and on the old Coliseum Road bypass, that the new road would divert traffic and business. City and regional planning officials, however, supported the bypass on the grounds that the existing transportation infrastructure was inadequate to make the region competitive for future growth and investment. Immediately following construction of the I-469, traffic volumes on the old bypass were down by about 5,000 to 8,000 vehicles a day. Due to growth in traffic, however, traffic counts are now up to their past pre-bypass levels – about 30,000 to 50,000 vehicles a day. A significant volume of truck traffic has been diverted onto the bypass, which carries a lower volume of 20,000 to 30,000 vehicles a day, on average.

The 30-mile long I-469 bypass goes from Interstate 69 south of the city limits, extending eastward in an half loop back up to I-69 on the north side of the city. Since it adds 15 miles to the journey, the bypass is used primarily for local and regional travel rather than for long-distance I-69 travel. It provides a connector and distributor for traffic on the older US radial highways forming spokes around the city of Fort Wayne. US-30, US-24, and US-33 are now routed along the outer rim of the city by the bypass. About 70% of the traffic on the bypass is regional, with the balance being local traffic.



Population and Economy. The Fort Wayne Indiana metro area with just over 300,000 people and 174,000 jobs has experienced modest growth since 1980. Over the past 18 years, population has grown by only 0.1% a year, while jobs have increased by 1.3% annually. The city of Fort Wayne, in Allen County, has 203,000 residents. It has grown by 35,000 people within the past decade, although that has been due largely to annexations.

The area has traditionally been dependent on manufacturing, which accounts for 26% of the workers, compared with the national average of 15%. The auto industry continues to be dominant. The city is an important regional retailing and service center. The nearest large cities are over 100 miles away, giving Fort Wayne a trade area that extends 50 to 60 miles outward.

Impact on New Development. Thirty years before the completion of the I-469 bypass, Interstate 69, bordering the city on the western fringes, was completed. This road was routed about 4 to 5 miles west of the city center through what was then a rural area. It took over 10 years for I-69 to have a profound impact on development patterns in the metro area. Eventually, however, new shopping malls located at interchanges along the new interstate took trade from downtown, and ultimately helped bring about the collapse of the downtown retail sector. One major utility, a number of corporate headquarters, and a major hospital moved to sites along the new highway, pulling residential development to the west side of the metro area.

To date, the I-469 Bypass, completed just four years ago, has had little impact on development, except in the southeast and the northeast where residential growth was already occurring. There has been no "leapfrog" effect on development in the region. The bypass transgresses largely rural unincorporated areas of Allen County, most of which lack adequate water and sewer capacity for commercial development.

On the southern end, there has been no development at the first two interchanges, which are still surrounded by green fields. A major food distribution warehouse has located near the third interchange, near the airport. This site on I-469 was key in attracting the new employer into the region. The county is spending $8 million to increase the capacity of water and sewer systems here to attract more freight forwarding and distribution operations.

There has been no development for the next six interchanges, which span a six-mile arc on the southeast of the region. Due east of the city center, at the Interchange with Route 30, a truck stop, fast food, and convenience retail strip has developed to serve the passing trade on I-469. At the next interchange to the North, at Route 24, a major HVAC manufacturer, Aeroquip Corp., has located, bringing 550 new jobs into the region. The highway was fundamental to the decision to site the plant in Fort Wayne.

The next junction with Route 37 has seen the most commercial development in the form of box retail uses. There is now a large Meijers grocery / general merchandise

super store. A Menards home improvement store will soon open at the site. These stores are fed by the residential development in this area. The pace of house building here had slowed during the recession and was considered to be suffering due to its poor access. The bypass and the strong economy have spurred residential growth supported by the retail uses. In other words, the population was here before the retailers and was a necessary pre-condition to the establishment of outlets here. The bypass also facilitated the decision, but was not fundamental.

Access restrictions on Maplehurst Road, at the next interchange, have discouraged large-scale development, but some smaller strip retail uses are now going through permitting. The most active development hot-spot in the region is just north of the I-469 bypass on I-69 where two satellite facilities for two local hospitals, a large corporate headquarters facility, and apartments, with scattered commercial uses have developed. As previously noted, I-69, in the eastern part of the Metro area is the most-developed artery and is likely to be some time before I-469 catches up.

Impact on the City of Fort Wayne. The merchants on Coliseum Road, the old route, who vehemently opposed the project during the planning stages have not been negatively affected by the bypass. Average daily traffic on the old bypass route exceeds that on the new bypass by 50% to 60% and traffic volumes on the old road are now up to their previous levels before I-469 was built. New sites on Coliseum Road continue to be developed for retail and convenience uses.

Downtown Fort Wayne was nearly devastated in the mid 1960's in the wake of the opening of large regional malls along Interstate 69 and the loss of corporations and institutions to sites along the new highway. Prior to construction of the bypass, downtown had struggled to re-established itself as a corporate center for business and financial services and as a cultural and educational center. There has been some reuse and redevelopment of old buildings, but funds are low and, in a town dominated by manufacturing, the office market is weak. High vacancy in existing Class A space has been a problem, even during recent bull economic times.

New fringe-area housing development at the northern edge of I-469 has not hurt the city's housing market, which is generally healthy, with rising prices and brisk sales. About 1500 to 1600 new permits are granted each year for new housing units. Residential vacancy is low.

Conclusions. Fort Wayne presents a typical case of a short-term development response to a fringe-area bypass in a community of 200,000 to 300,000. Except in areas with existing pressure for development, like the airport and the burgeoning northeast suburbs, there has been little development at interchanges of the bypass. The bypass, has, however, begun to attract some industrial uses that are bringing new jobs into the region. Availability of infrastructure is critical for development and the local authorities have been active in raising funds to bring water and sewer to target industrial sites near the airport. In the longer term, when sites along the more established I-69 western development corridor are saturated, more development will

be pulled toward the east. Gradually, the focus will shift to the east toward I-469. In a slow growth region, this shift could cause vacancies in the inner core. But the process is expected to be slow, allowing the inner areas to adapt to new, lower-density uses.

Lessons Learned. The Fort-Wayne I-469 Bypass illustrates the short-term impacts on fringe development in a slow-growth environment. The most notable points are:

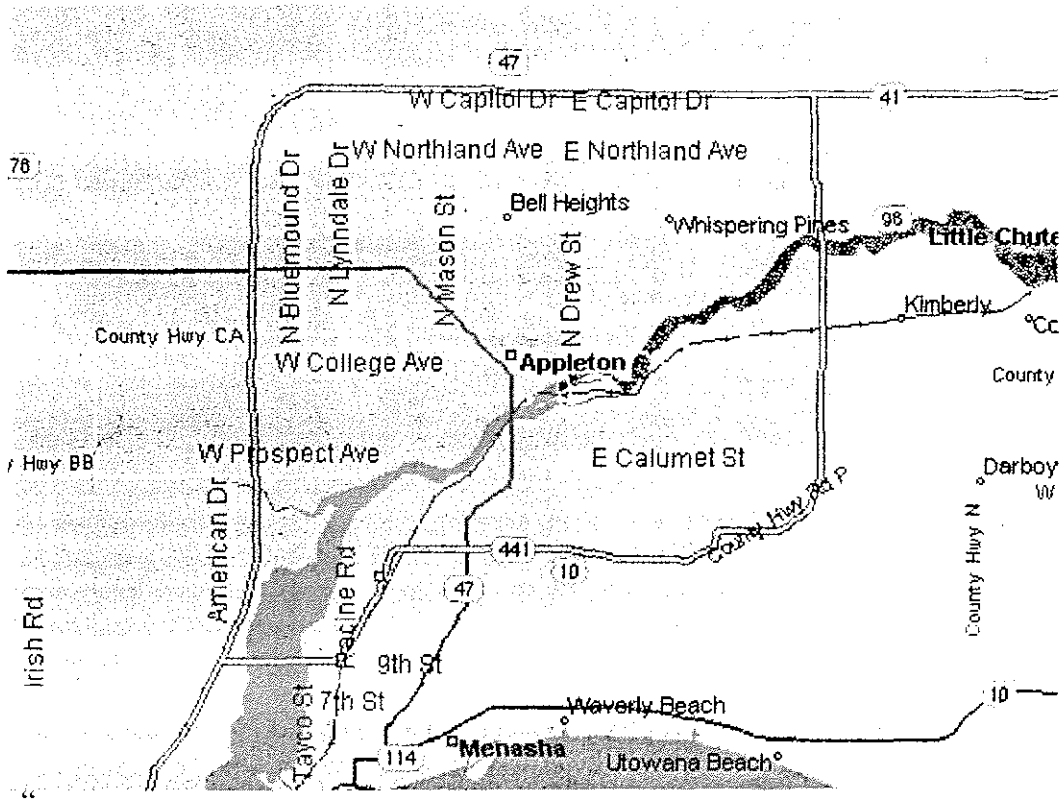
- A new interstate corridor can open up sites for development that can attract investment from outside of the region. However, without supporting infrastructure and a supporting population base (in the case of retailing), there will not necessarily be any immediate development explosion.

- In the longer term, outer-beltway bypasses may have profound effects on development patterns, but in small, slow-growth cities this effect could take 20 years.

❖ 5 Appleton, Wisconsin: Route 441 Bypass

Route 441 is a new freeway which skirts around the city of Appleton, Wisconsin, forming part of an outer ring road bordering the city on the east and south sides. The road is not really a bypass for long distance traffic, which continues to be routed along the US- 41 freeway. Its main function is rather to route local traffic around the city. Planning for Route 441 began in the 1970's, but was not completed until 1992. The seven-mile long freeway has four major interchanges. Most of the development opportunities near these interchanges are in the surrounding counties of Oshkosh, Winnebago, and Outagamie.

Context. Appleton is a city of 72,000 within an MSA of 350,000. The population of the MSA has been growing by about 2% a year, in line with employment growth. Jobs in the MSA have grown by about 23% since 1990, but job growth in the city has been significantly lower at just 2% over the nine-year period. Meanwhile jobs in the rest of the MSA have grown by 30% since 1990. The city now has 20% of the region's jobs compared with 25% in 1990. The home of Appleton Paper Company, manufacturing is the major employer. In the city, business and financial services are strong and tourism is emerging as an important employer.



Impact on New Development. Aside from relieving the US-41 freeway of local traffic, the major impact of Route 441 has been to spawn retail development at the interchanges. Three major "Power Center" developments, anchored by discount mass merchandisers and "category killer" big box stores, have developed at its interchanges. In total, about 100 acres have been developed for retailing. The new space has been supported by the strong growth trend, averaging about 2% a year over the past decade. This growth is now slowing to about 1% a year and planners fear the area is becoming over-shopped, resulting in retail vacancies.

Driven by the region's strong industrial tradition, about 100 acres of industrial land near the interchanges have also been developed. A more limited amount of office space has been developed in suburban locations near the interchanges. Some residential sprawl development at the outer fringes of the MSA has been supported by the infrastructure serving commercial development along Route 441, but most has occurred in areas not directly served by the freeway.

Impact on the City Center. Retailing in downtown Appleton was hard-hit by the Fox River Mall, a 1.4 million sq. ft. development on the western edge of the MSA that opened in the late 1970's, well before Route 441 was built. Since then, downtown Appleton has restructured away from retailing and toward a more

specialized role as a financial services and entertainment district. Some redevelopment and reuse of retail stores as office space has been funded by CD grants and by special Tax Increment Financing districts. A downtown shopping mall development has been moderately successful, retaining one department store downtown.

The business and financial services sector is strong and vacancy in offices has been low. A $32 million Performing Arts Center is now under construction to reinforce the city's role as a tourism, entertainment, and cultural center. Hotels, convention facilities, and restaurants downtown are reported to be thriving. Daytime office activity is supplemented in the evenings by patronage of entertainment and tourist outlets.

Conclusions. Route 441 has had both positive and negative impacts on the city of Appleton. On the positive side, the road has relieved traffic on Interstate 41 and on routes along the edges of the city. The new highway has facilitated about 100 acres of industrial development.

On the negative side, Route 441 has spawned new retail growth that, with the deceleration in growth projected to occur over the next several years, may result in a surplus of retail space. The proliferation of discount power centers at the interchanges has had a negative impact, not so much on downtown Appleton, which has been restructuring away from retailing for the past twenty years, but on a number of small towns surrounding Appleton.

The new highway has also spawned some office development that may well have occurred in the city center without the interchange sites. Although the city has been active in financing redevelopment and reuse of downtown buildings, more redevelopment of downtown office space at higher densities would have been encouraged if sites on Route 441 had not been available

Lessons Learned. The following points emerge from this case study:

- Bypasses designed to serve local traffic can have a significant impact on the development and location of retailing and local services.

- Planners under-anticipated the large volume of retail development produced by a local traffic-serving outer ring road.

- Regional planning controls can be used to prevent sprawl and over-development of retail space, but in practice, prevention is difficult. In cases where a bypass transgresses a number of jurisdictions, there will be competition for tax-producing retail and other commercial businesses.

- A strong redevelopment program using community development funds and tax incentives can lower costs of redeveloping downtown sites for non-retail uses.

- Outer beltways can open up sites for industrial development, particularly in cities with a strong industrial tradition.

Summary of Findings. The wide range of highway bypass studies carried out around the country provides a generally consistent story. They indicate highway bypasses are seldom either devastating or the savior of a community business district. The locational shift in traffic can cause some existing businesses to turn over or relocate, but net economic impacts on the broader community are usually relatively small (positive or negative). Communities and business districts having a strong identity as a destination for banking, health care, other services, or for convention visitors or tourists are the ones most likely to be strengthened due to the reduction in traffic delays through their centers.