

affect the attractiveness of Roanoke as a place to live. It is important to note how those issues can be related to the economic impacts:

- “Sprawl” is defined as dispersed, low density development. While that can be desirable for some people and businesses, there is evidence that such development can require greater investment costs for sewer and water lines, roads, police and fire facilities than denser “cluster development,” or reliance on “infill development” (which takes place in areas that already have the public infrastructure and facilities in place). The public costs and benefits can differ widely, though, depending on the specific locations of development sites.
- The type of development impacts associated with new highways and interchanges can also depend critically on the location and its land use regulation, as discussed in the case studies (Appendix D). In general, development occurs where there is not only highway interchange access, but also where there are available utility services, land, a surrounding base of customers and workers, and land use / development policies allowing it to occur. Public policy can either encourage or prevent development that is not desired, and hence also affect public costs of new development.
- Traffic congestion as well as highway access affect air quality and the attractiveness of a community as a place to live and do business. In that respect, impacts of highways can be positive or negative. Motor vehicle emissions tend to be increased when there are higher volumes of traffic. However, emissions also tend to be greatest when traffic congestion delays increase in severity, and there are no transportation system improvements made to reduce that congestion. For this reason, it is important to consider traffic congestion forecast to occur over the 1999 –2020 period under no-build as well as I-73 alternatives. Air quality is an issue addressed in the State’s Environmental Impact Report, and *not* in this report.