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## Using geographic information system to address environmental justice concerns in transportation projects

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Environmental Justice concerns were brought up in the county of Cape Girardeau about impacts to the community. These impacts, caused by the construction of a new bridge (crossing the Mississippi River) and the associated relocation of Route 74 (to the bridge), need to be addressed by the Department of Transportation (since the law now states that the environmental justice concerns must be addressed for federally funded projects). This project was designed to demonstrate how to improve the transportation decisions that meet the needs of all people in the community (such as that of Cape Girardeau) by using GIS to facilitate the analyzing process for Environmental Justice in minority and low-income populations. Using data obtained from the Missouri Spatial Data Information Services and Cape Girardeau, Geographic Information Systems was used to create two different maps showing the per capita income and percent minority of that area in Cape Girardeau. This information showed that there were obvious environmental justice issues that needed to be examined.