

## DEVELOPMENT OF METHODOLOGY FOR BUILDING A GEOINFORMATION SYSTEM FOR ANALYSIS OF NOVOSIBIRSK CYCLING INFRASTRUCTURE

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The article discusses the development of a methodology for creating a geographic information system for the analysis of cycling infrastructure in the city of Novosibirsk. A publicly available GIS for analyzing cycling infrastructure with an up-to-date database should ensure efficient control over the state of the city's cycling infrastructure, its use and development, as well as access to the cycling infrastructure information to all interested citizens with the ability to contribute to its improvement. To implement GIS in practice the following basic instruments were used: full-featured software for preparing mapping materials – ArcGis; JavaScript library, intended to display maps on web-sites – Leaflet. As a result the article represents technological scheme of GIS creation, gives the description of structural content for attributive information, offers the methods for analysis of the condition and development of cycling infrastructure, as well as describes tools for the creation of the interactive map with the help of Leaflet.

**Keywords:** cycling infrastructure, geographic information system, bicycle route, cartographic material, ArcGIS, Leaflet, interactive map

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