

**TRANSPORTATION RESEARCH THESAURUS (TRT)
TERM REVIEW FORM v2.0**

Date 5-18-10

Term Geospatial analysis

Proposed by

Citation(s) Q3 2010

Definition Limiting the definition of geospatial analysis to 2D mapping operations and spatial statistics remains too restrictive for our purposes. There are other very important areas to be considered. These include: surface analysis –in particular analyzing the properties of physical surfaces, such as gradient, aspect and visibility, and analyzing surface-like data “fields”; network analysis – examining the properties of natural and man-made networks in order to understand the behavior of flows within and around such networks; and locational analysis. GIS-based network analysis may be used to address a wide range of practical problems such as route selection and facility location, and problems involving flows such as those found in hydrology. In many instances location problems relate to networks and as such are often best addressed with tools designed for this purpose, but in others existing networks may have little or no relevance or may be impractical to incorporate within the modeling process. Problems that are not specifically network constrained, such as new road or pipeline routing, regional warehouse location, mobile phone mast positioning, pedestrian movement or the selection of rural community health care sites, may be effectively analyzed (at least initially) without reference to existing physical networks.-- <http://www.spatialanalysisonline.com/output/handbookextract.pdf>

Scope note (if needed)

Broader term **Spatial analysis**

Notational code: **Usdsg**

Narrower term

Associative relationships

Related terms: **Geographic information systems**

Cross-references:

USE/UF terms

Variant forms

Homographs

Usage/Warrant/Statistics (# of hits/search results for term in quotes, e.g., "automobile factories")

- Search term, variants, and/or synonyms identified if necessary
- Use a minimum of five sources
- Note currency of term usage

CATALOGS	TI	KW	SU	AB
NTL Digital Repository	1	4	0	
VDOT OneSearch				
DOT HQ		4		
FHWA		1		
NUCAT (NUTL)	0	6	0	
TranWeb (NUTL)	0	1	0	
NTIS	11	37		96
TRIS Online	3	18	14	
UMTRI	0	0	0	
RiP	0	3	1	
VDOT		0		
WorldCat	142	338	71	
Google StateDOT		9		
Google Scholar		3080		
Other thesauri, taxonomies, or schemes				
LCSH				
Taxonomy Warehouse				

Other/Comments

[http://www.transportationresearch.gov/NTL/TRT/Research%20Wiki/August%202009%20\(Q3\)%20Terms%20to%20Park.aspx](http://www.transportationresearch.gov/NTL/TRT/Research%20Wiki/August%202009%20(Q3)%20Terms%20to%20Park.aspx)

Action x_ Add _ Update _ Decline _ Remove _ Park

Type x_ Preferred term _ Non-preferred term