

Visual permeability—% visible river space (B.1.2.1a)

Definition:

Visual permeability is an indicator of spatial quality that shows the percentage of visible open space within the river space. Values: [1] **low visibility**, when lower than 25%, [2] **medium visibility** between 25% and 75%, and [3] **high visibility** above 75%.

Input data:

- Corridor segment boundaries
- Digital elevation model¹⁰⁵
- Buffer from river edges: 150m
- Buildings (OSM)

Implementation:

- 1 A digital elevation model (DEM) and buildings within the corridor are used as input to a viewshed analysis. The viewshed analysis is performed from the river edges.
- 2 A 150m buffer is created along the river edges.
- 3 The percentage of visible open space is given by dividing the total visibility area (A_{vis}) by the total area of the buffer (A_{tot}) within the corridor segment. Values are classified as [1] **low visibility**, when lower than 25%, [2] **medium visibility** between 25% and 75%, and [3] **high visibility** above 75%.

Results for CS03:

- A_{vis} = **331.866 m²**
- A_{tot} = **666.947 m²**
- Visible river space: **49,8%**

105

For the digital elevation model, 30m resolution SRTM data was used. (USGS, 2017)

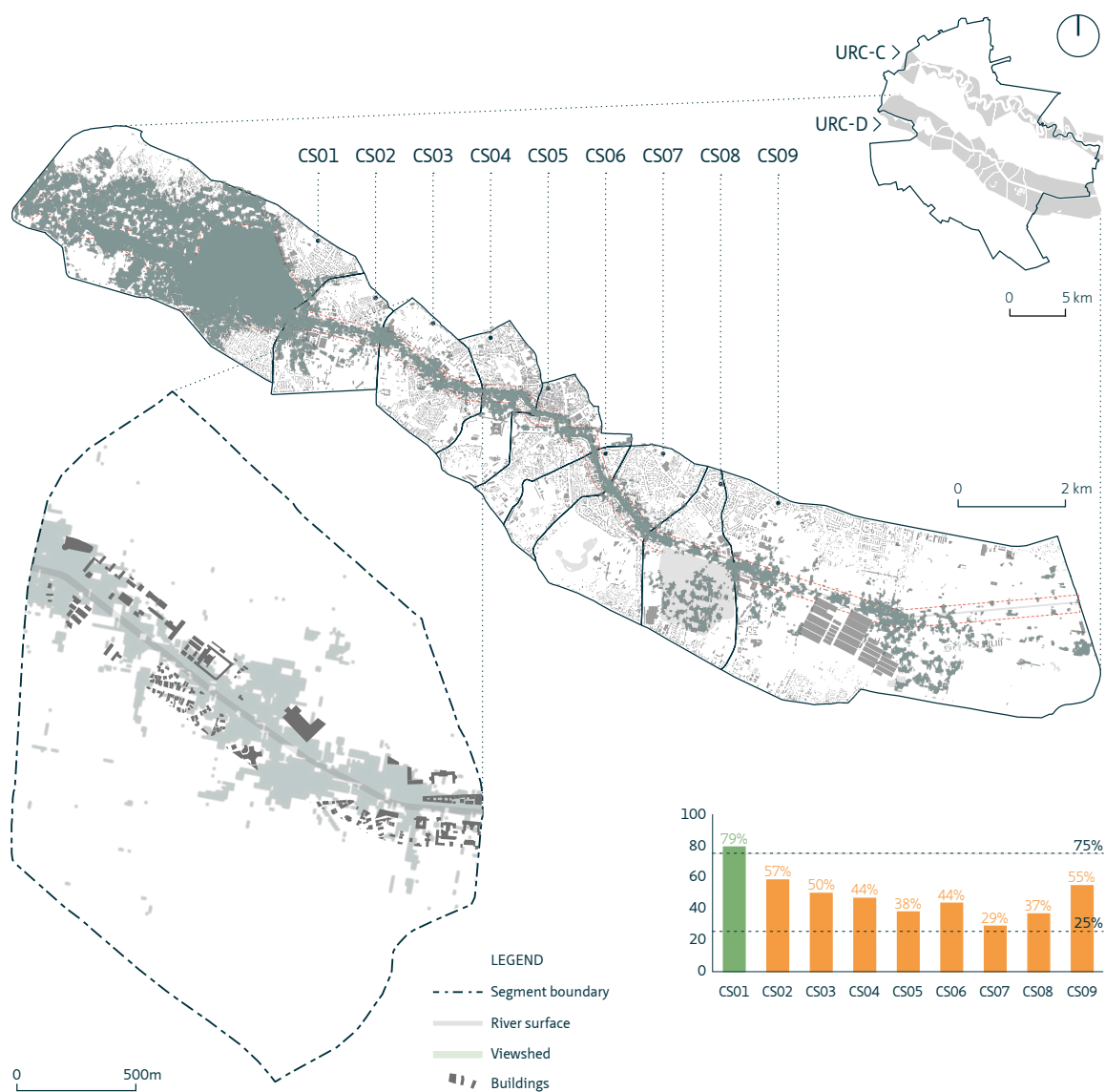


FIGURE APP.E.13 Visual permeability—% visible river space along URC Dâmbovița, with detail of CS03.

SEGMENT	VALUE	INDEX
CS01	79.198%	3
CS02	57.286%	2
CS03	49.759%	2
CS04	44.412%	2
CS05	37.922%	2
CS06	43.536%	2
CS07	28.944%	2
CS08	36.684%	2
CS09	54.605%	2

TABLE APP.E.15 Results of indicator B.1.2.1a.