

# The Sound of Vienna

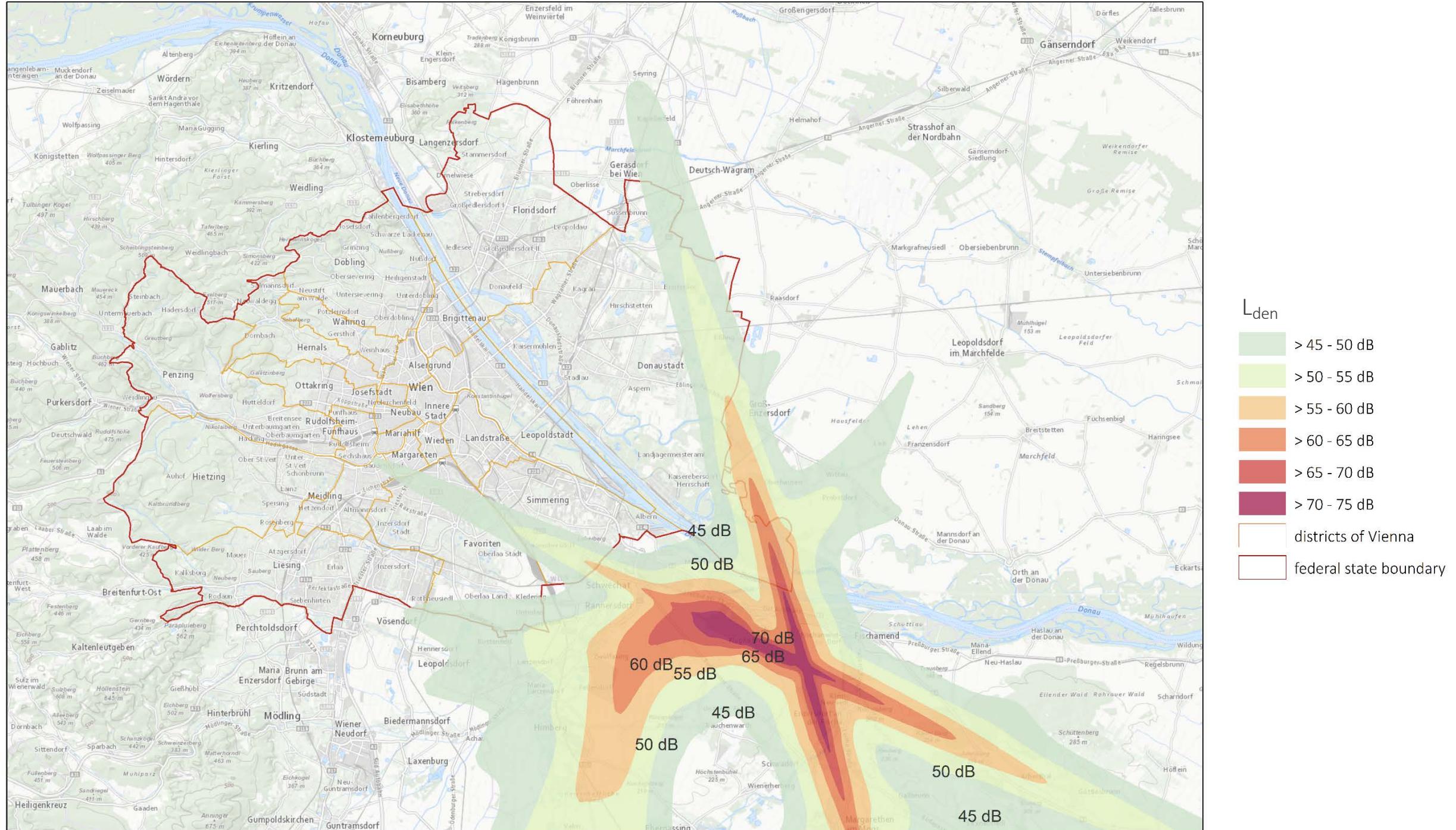
Aviation and Ambient Noise



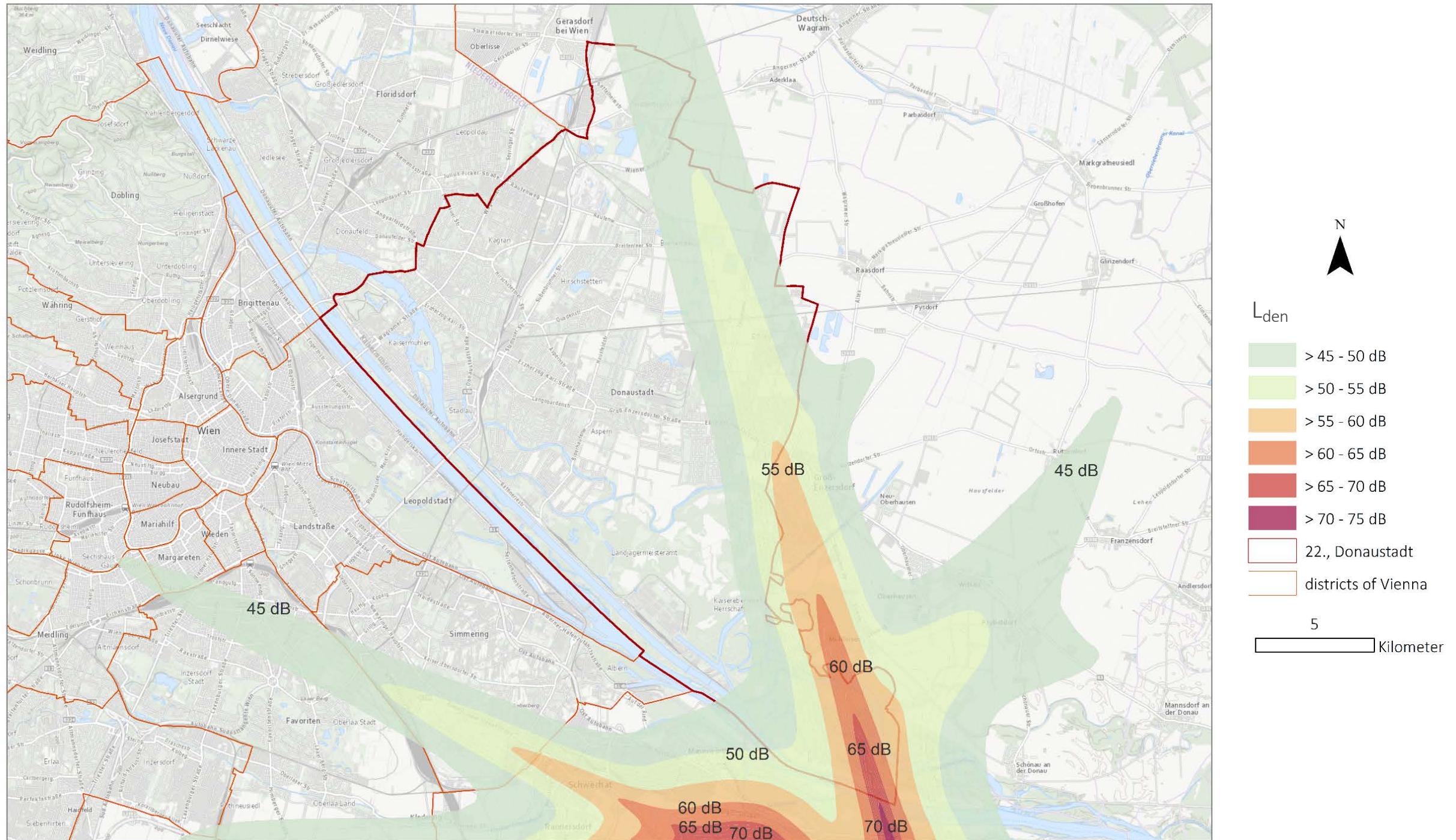
# Overview

1. Aviation Noise in Vienna
2. Example 22., Donaustadt
3. Ambient Noise in Vienna
4. Tool-Development: ActionMatrix

# Aviation Noise in Vienna



# Example: 22., Donaustadt



# People Affected



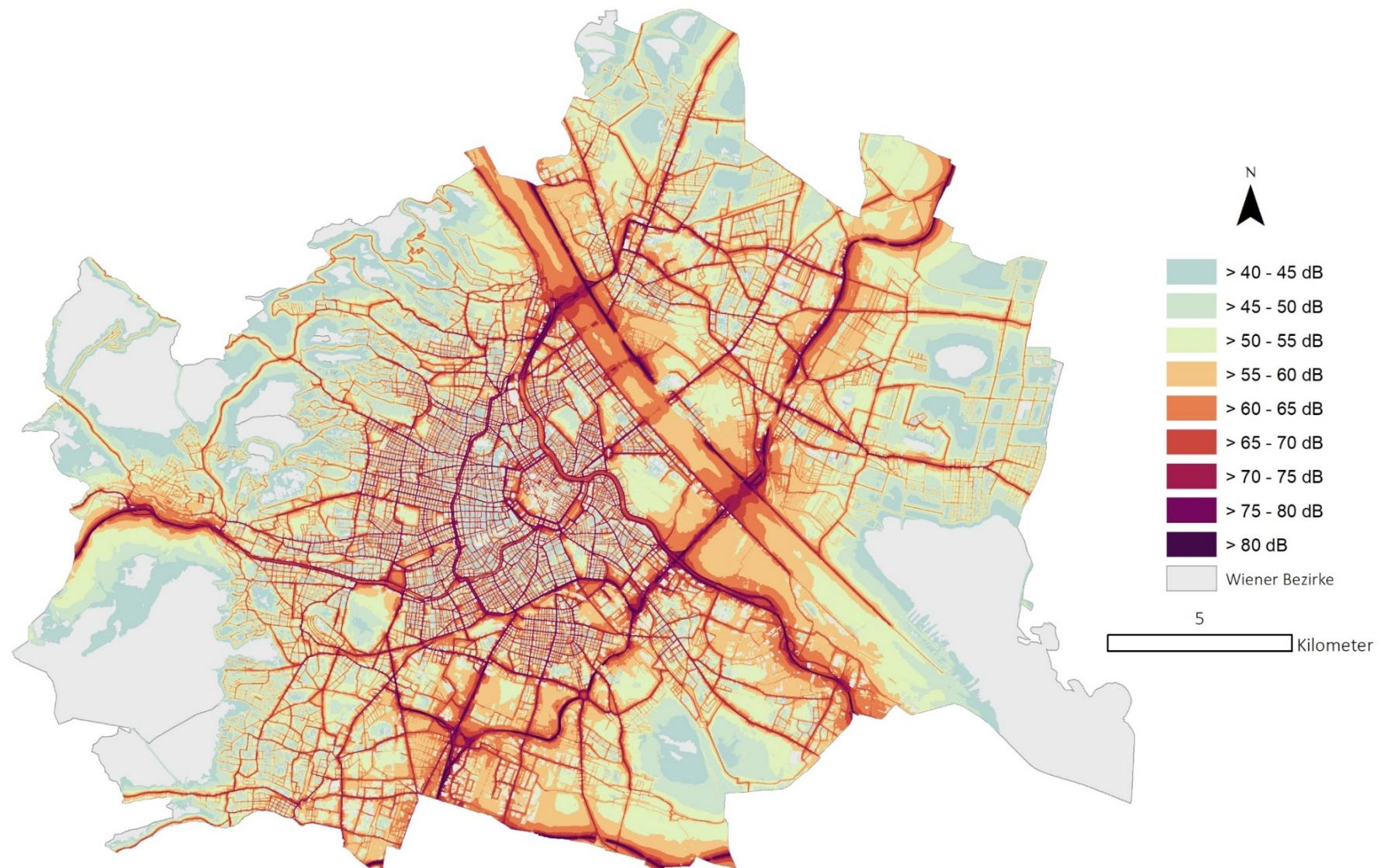
# Good Practice Guide

European Environment Agency



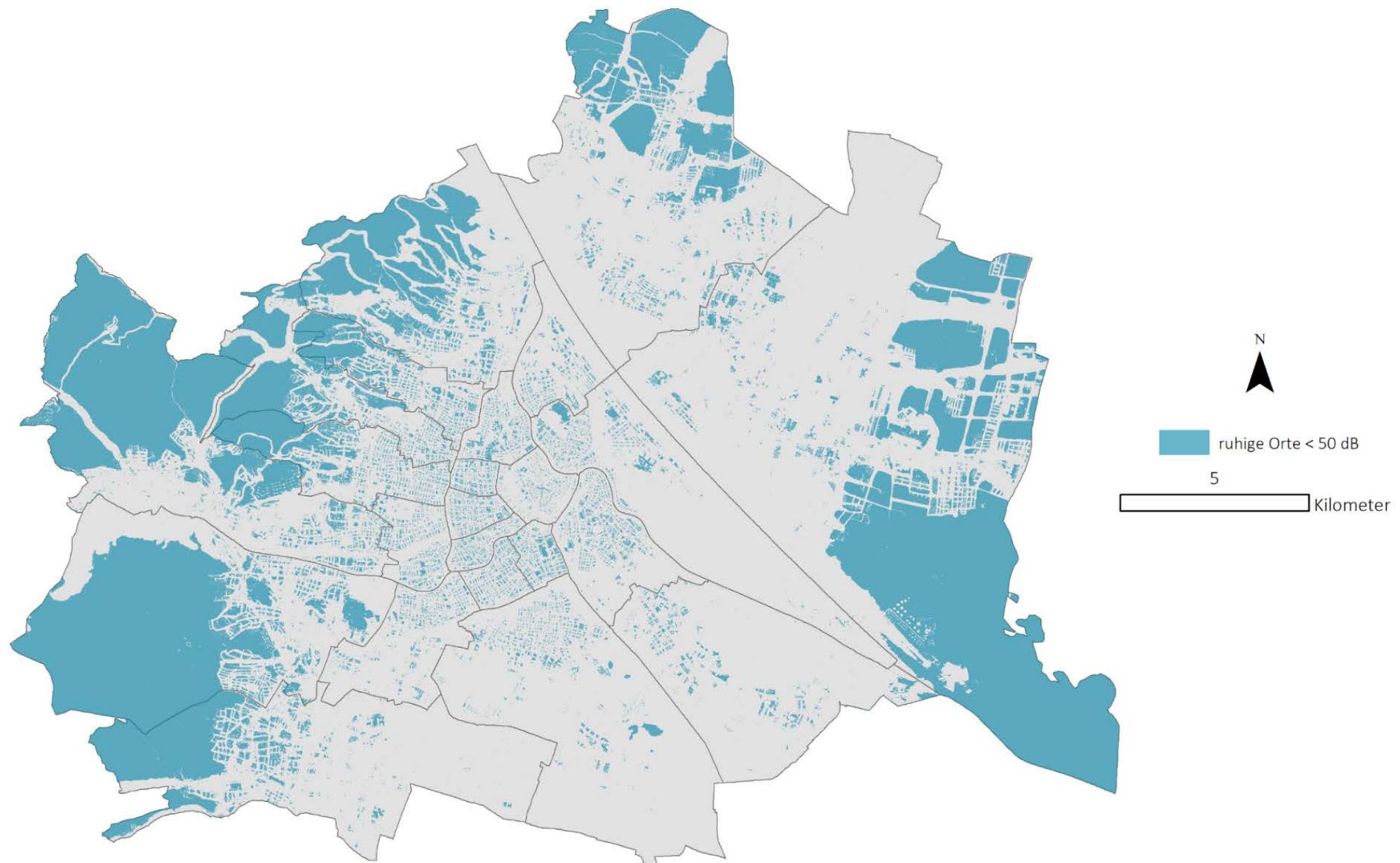
Source:  
European Environment Agency 2010

# Foundation - Strategic Noise Map END2017

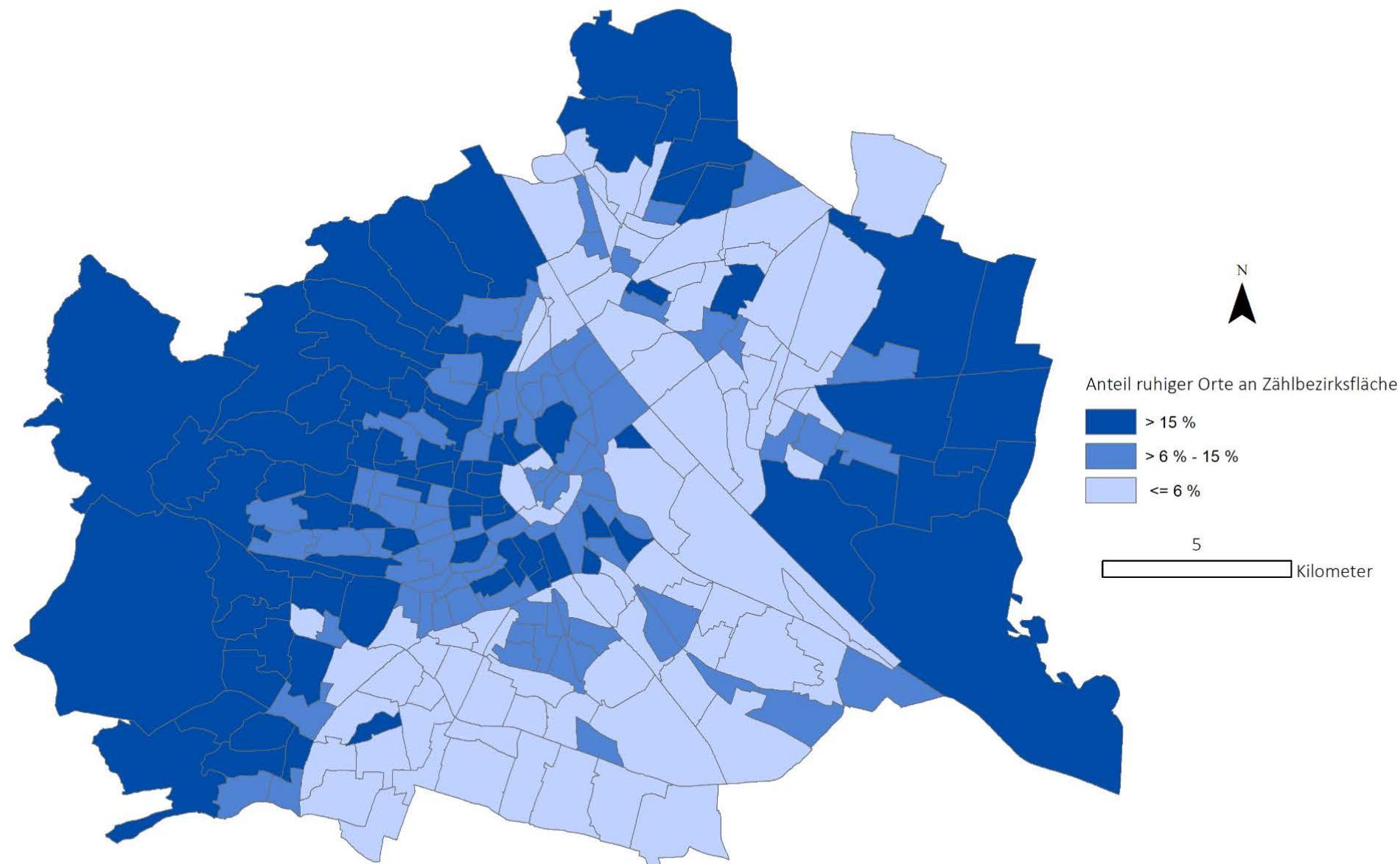


Sources:  
noise map – MA 22 (2017)  
colour scheme – Weninger (2015)

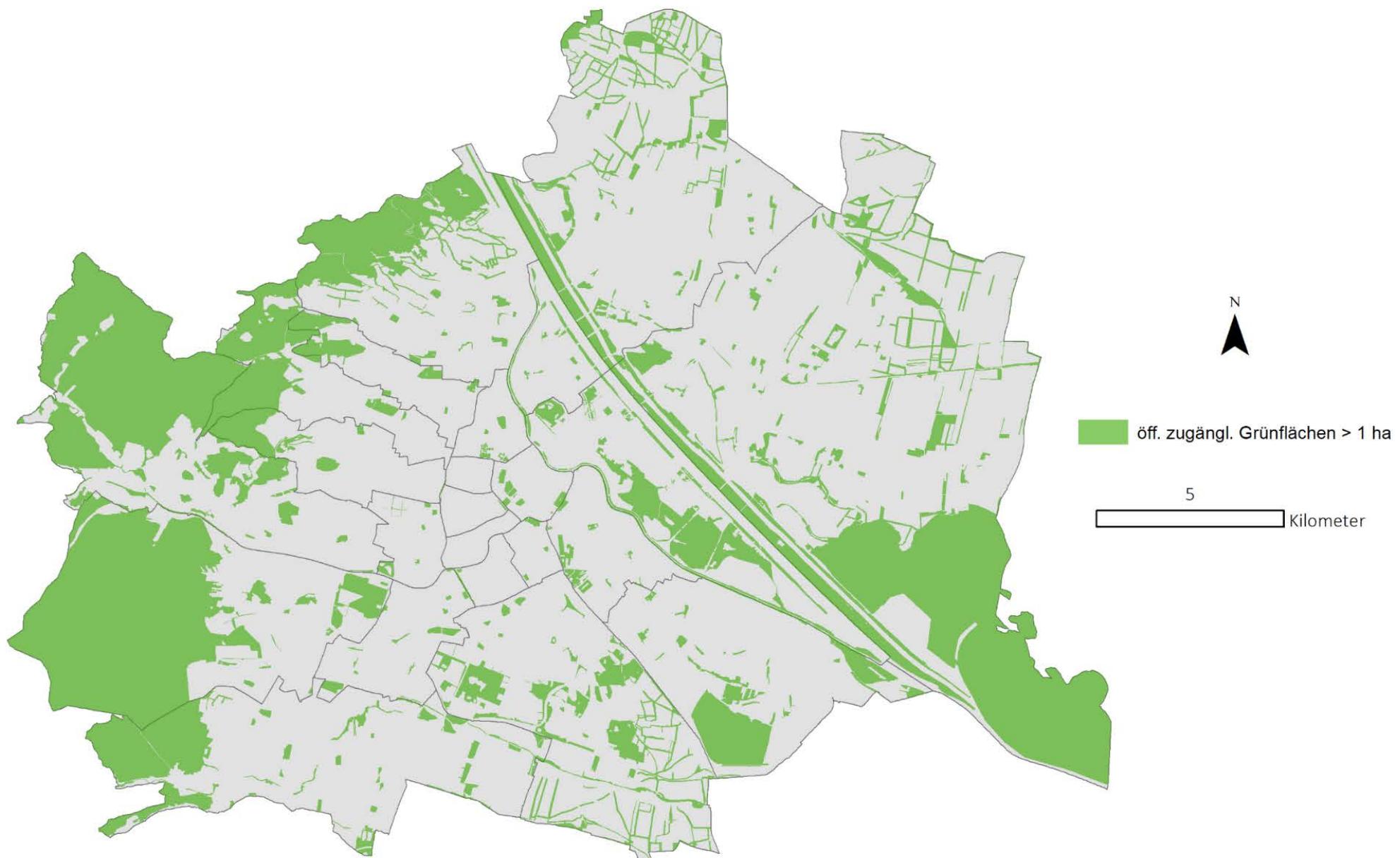
# Quiet Places



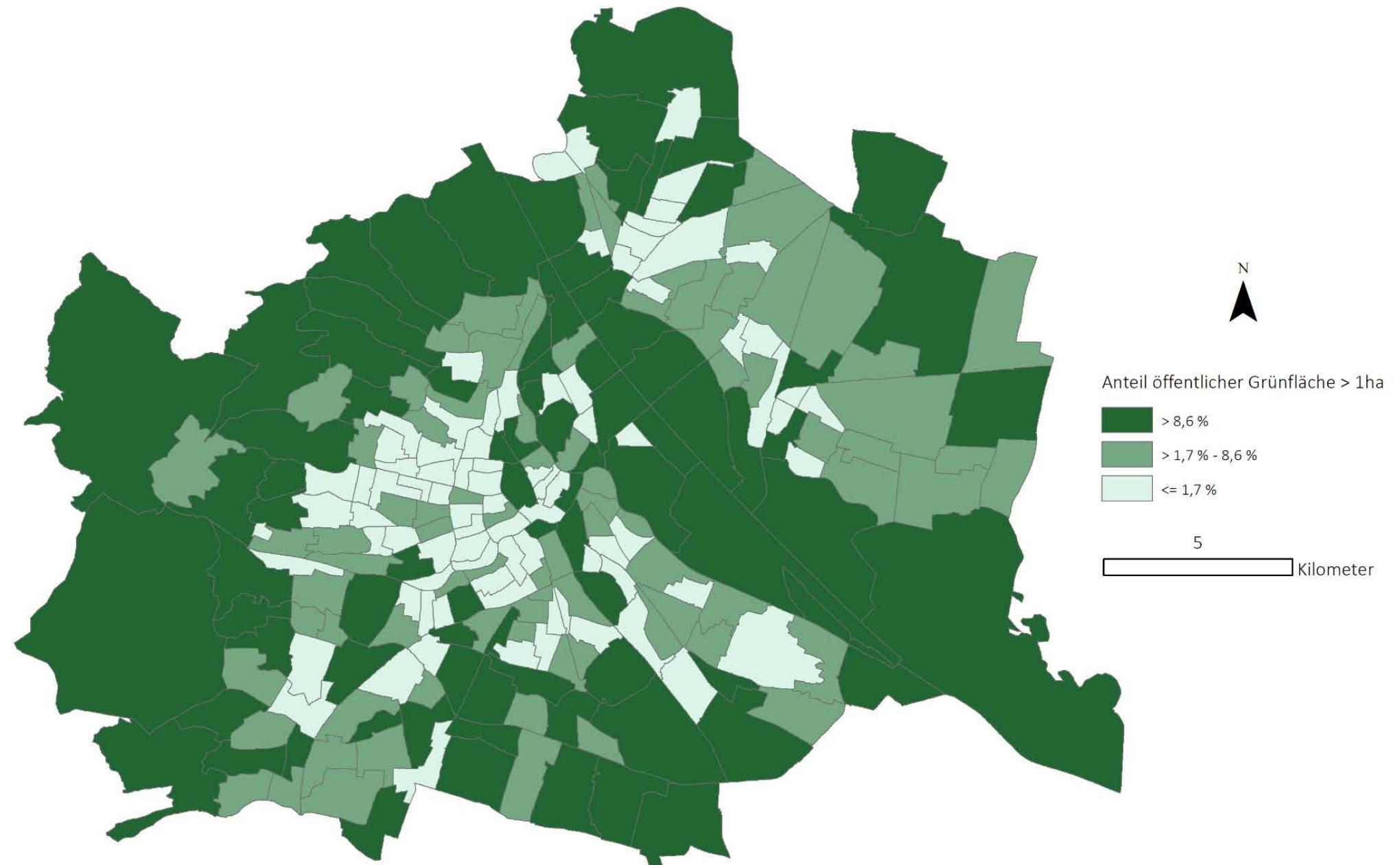
# Quiet Places



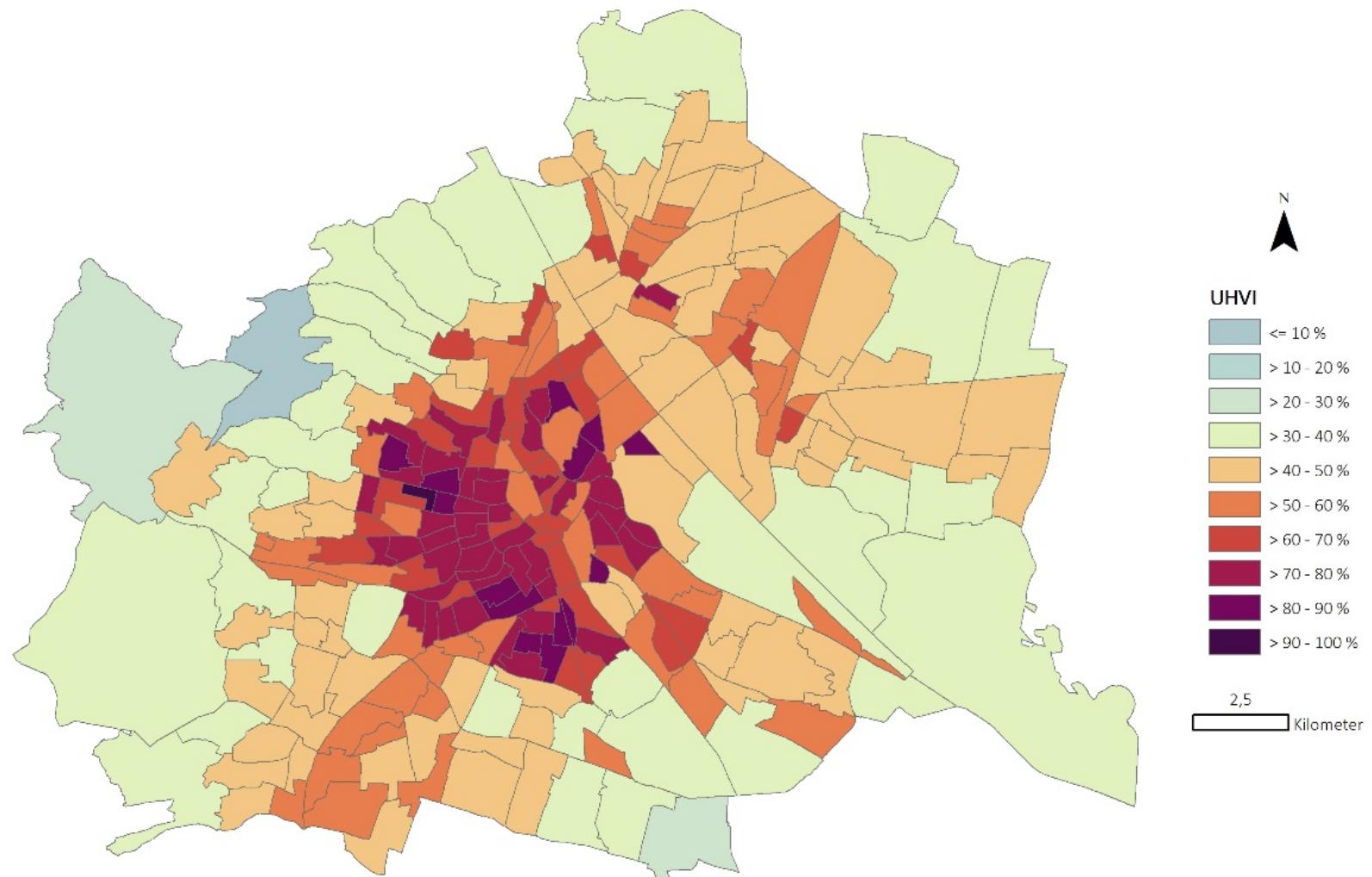
# Public Green Areas



# Public Green Areas

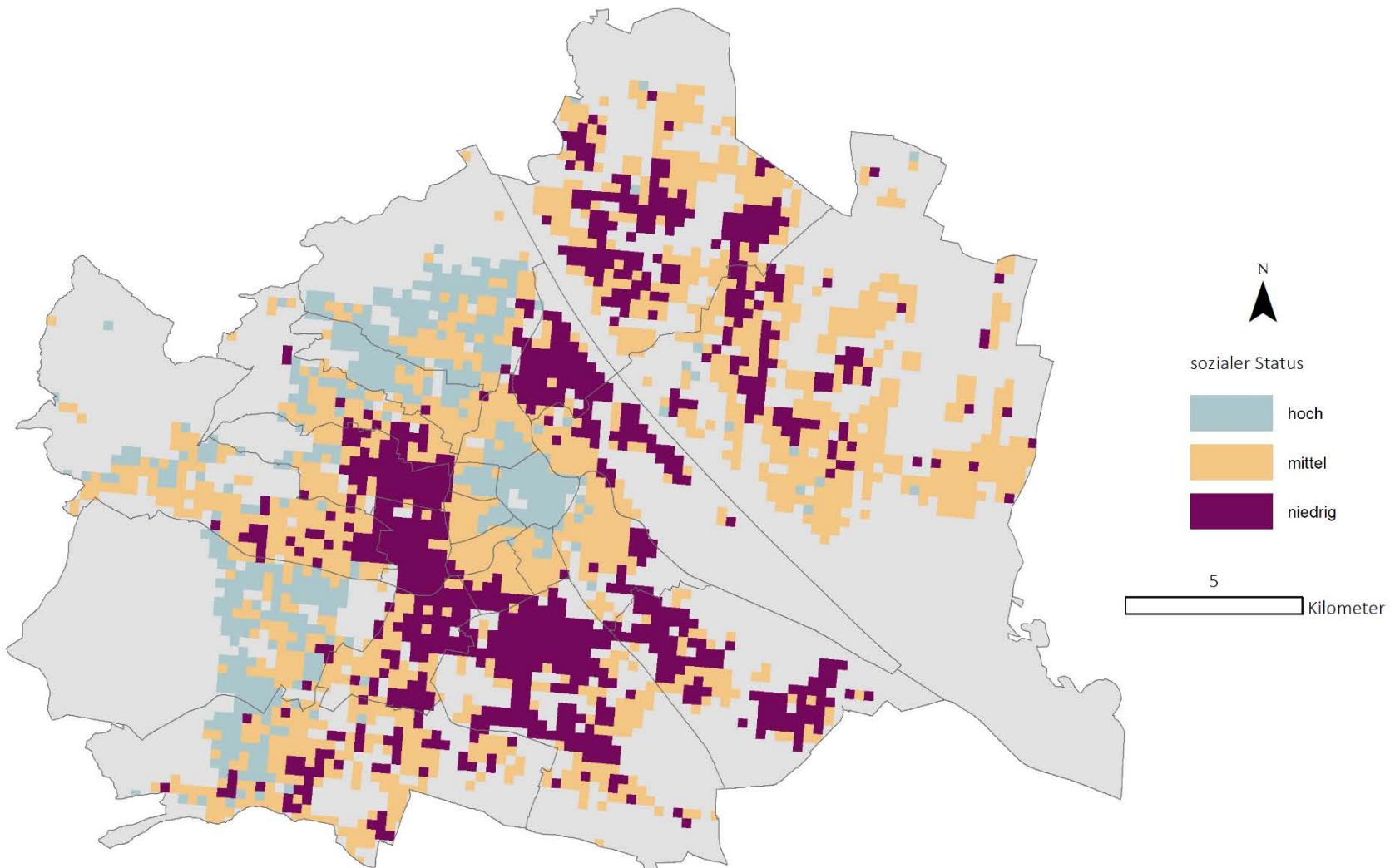


# Urban Heat Vulnerability Index (2019)



- Urban Heat Vulnerability Index (UHVI)
  - Combination of **3 factors**:
    1. **exposure** to heat events
    2. **sensitivity** of the population
    3. **adaptive capacity** (green and blue infrastructure)
- Z-standardisation

# Social Status (2020)

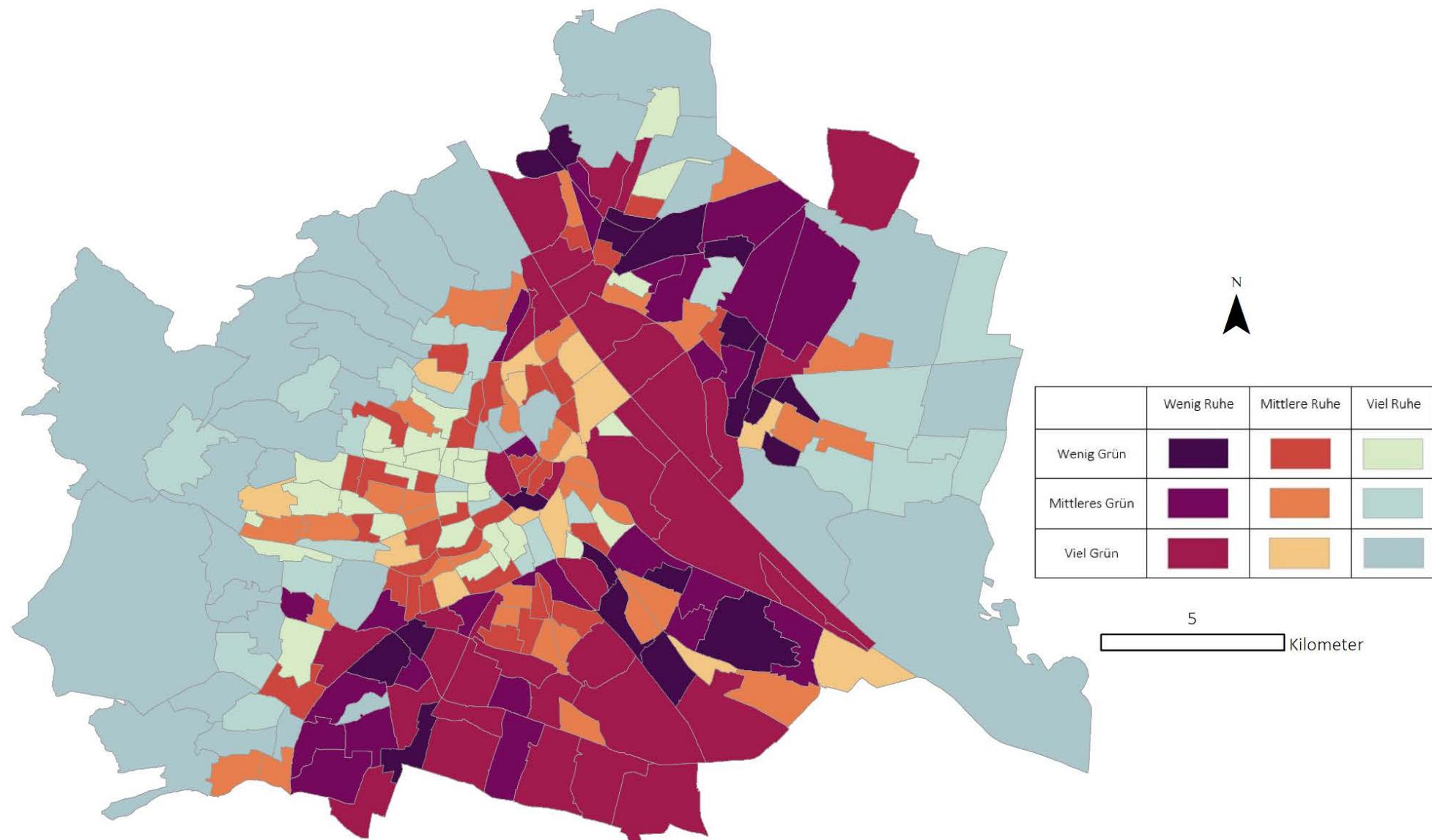


Combination of **4 factors**:

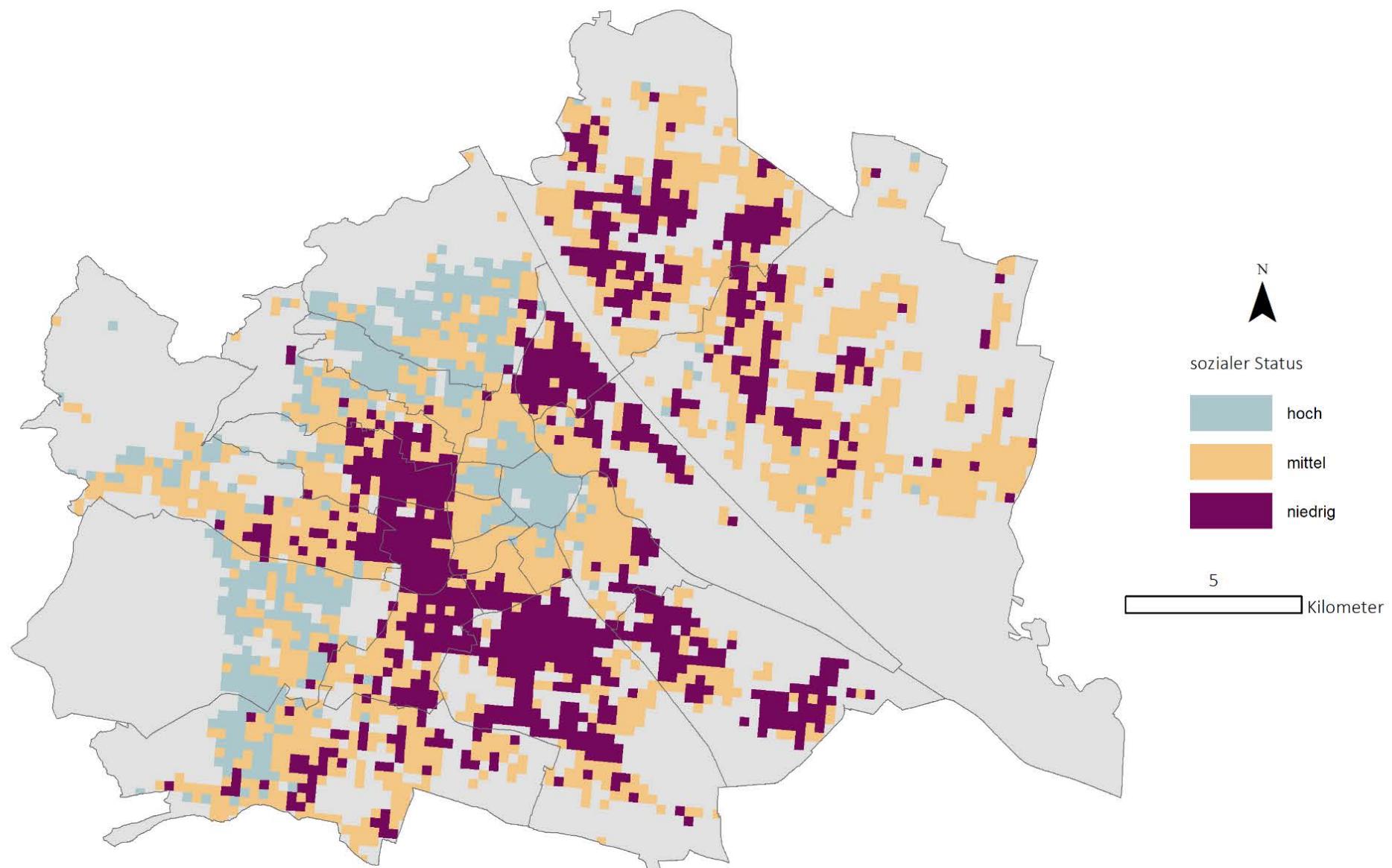
1. Average net income per person
2. Share of people with a university degree
3. Share of unemployed people
4. Share of people with only compulsory schooling

# Intersections

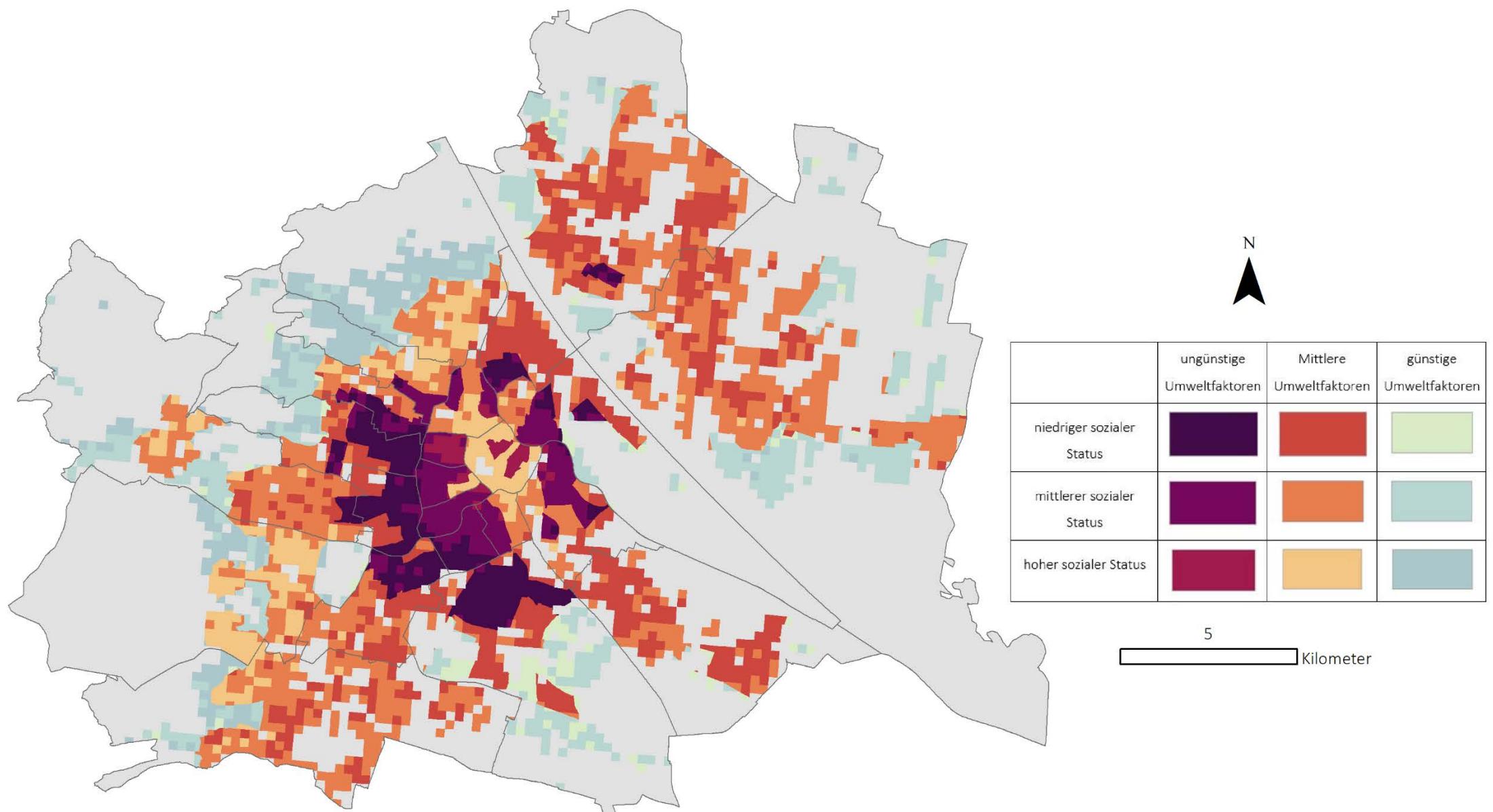
# Quiet Places & Green Areas



# UHVI & Quiet Places & Green Areas

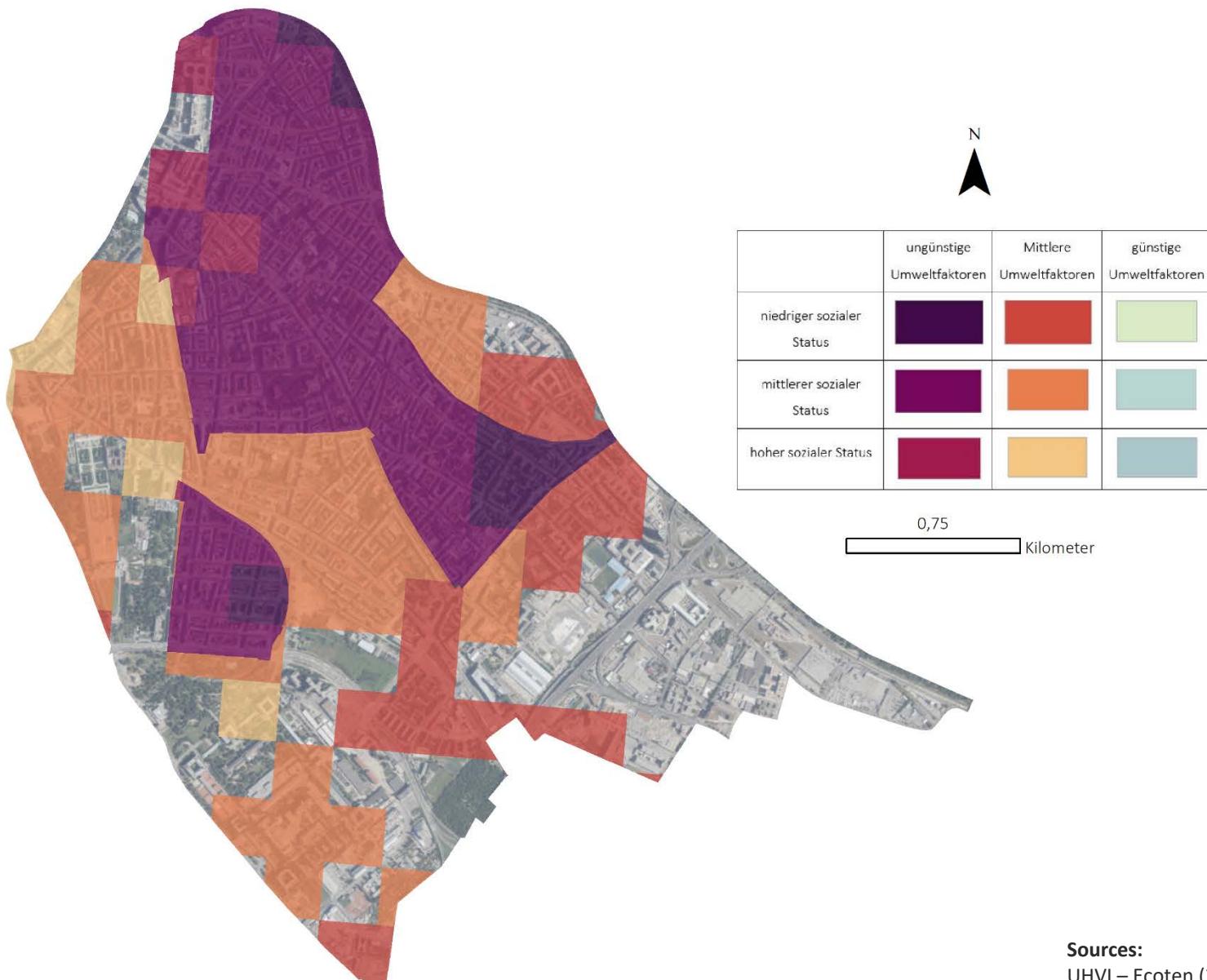


# ActionMatrix = UHVI & Quiet & Green & Social Status



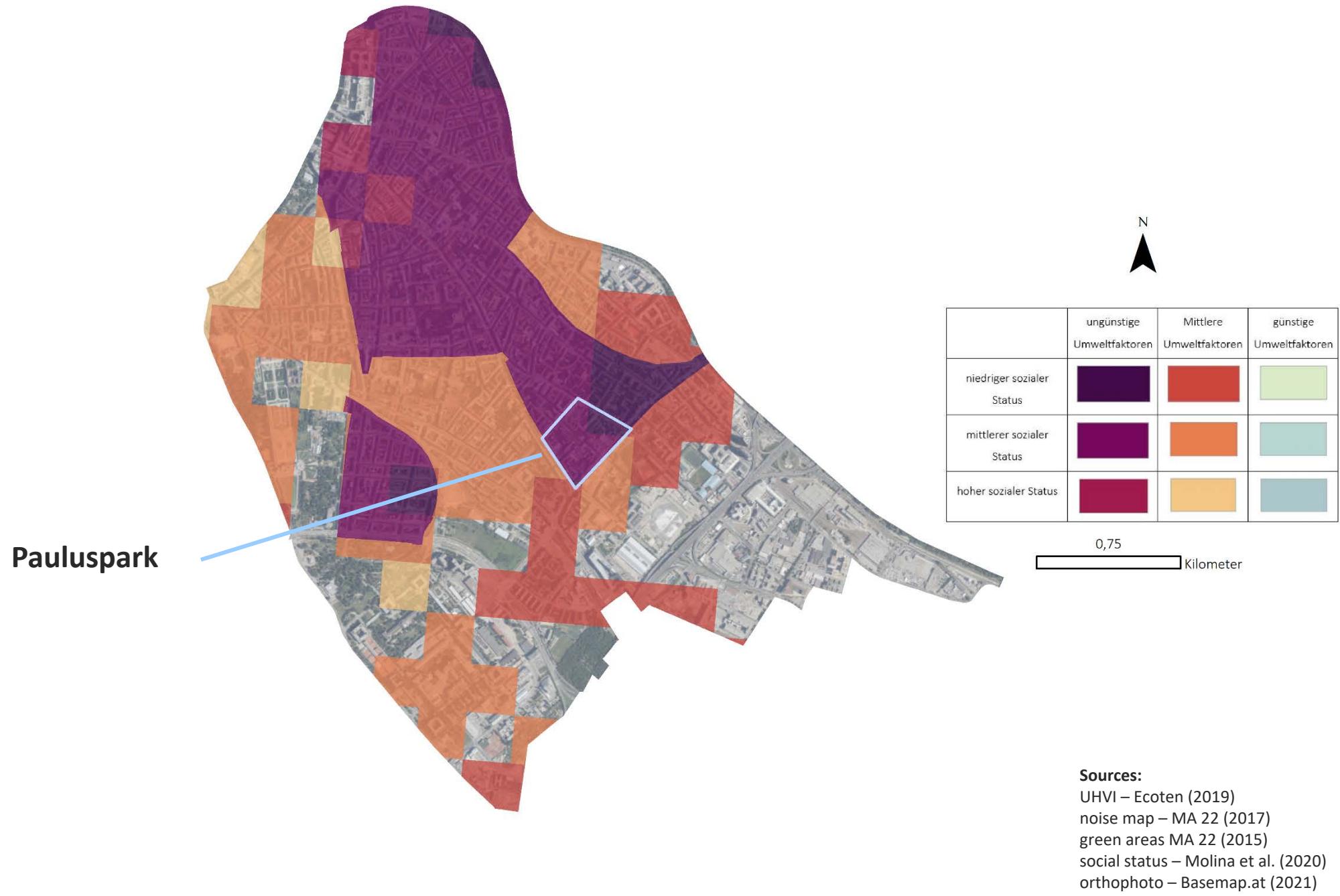
**Sources:**  
UHVI – Ecoten (2019)  
noise map – MA 22 (2017)  
green areas MA 22 (2015)  
social status – Molina et al. (2020)

# 3., Landstraße – ActionMatrix



**Sources:**  
UHVI – Ecoten (2019)  
noise map – MA 22 (2017)  
green areas MA 22 (2015)  
social status – Molina et al. (2020)  
orthophoto – Basemap.at (2021)

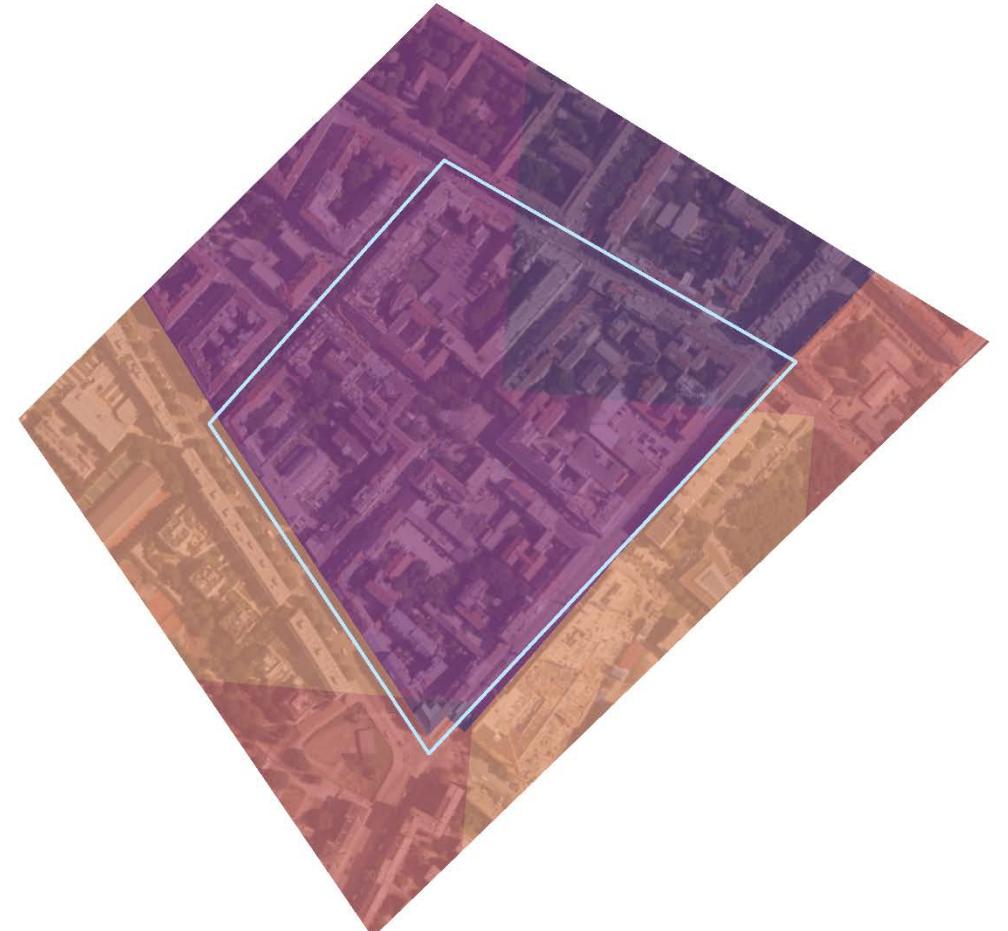
# 3., Landstraße – ActionMatrix



# Pauluspark – Taming the Traffic

- Public space, dominated by traffic because of an intersection
- Unfavourable environmental factors:
  - few quiet place
  - few public green spaces
  - high vulnerability to urban heat stress (high UHVI)
- Low to medium social status

→ Closing the intersection off  
→ Creating a public space with high sojourn qualities



## Sources:

- UHVI – Ecoten (2019)
- noise map – MA 22 (2017)
- green areas MA 22 (2015)
- social status – Molina et al. (2020)
- orthophoto – Basemap.at (2021)

# Pauluspark – Taming the Traffic



# Pauluspark – Taming the Traffic



# Sources

- aviation noise ..... **MA 22** (2015): Aviation Noise in Vienna.
- strategic noise map 2017 ..... **MA 22** (2017): END2017 – strategische Lärmkarte. Berechnet 2016 durch FCP ZT GmbH.
- quiet places ..... **MA 22** (2017): END2017 – strategische Lärmkarte. Berechnet 2016 durch FCP ZT GmbH.
- public green areas ..... **MA 22** (2015): Öffentlich zugängliche Grünflächen – Analyse. Analyse öffentlicher Grünflächen in Wien - Typen, Nutzung, Bewertung (accessed 02.02.2021).
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- basemap & orthophoto ..... **Basemap.at** (2021b): Verwaltungsgrundkarte von Österreich. <https://basemap.at/> (accessed 10.05.2021)