

Wasted Time : *Travel in Delhi*

Analyse the **excess time (wasted)** people spend while travelling from one place to another due to traffic or congestion.

What is the **EXCESS** or **WASTED** time for?

Different **AREAS** on a map

Different **DISTANCES**

HOURS of day / **DAY** of week

For **SCHOOLS, HOSPITALS**, etc

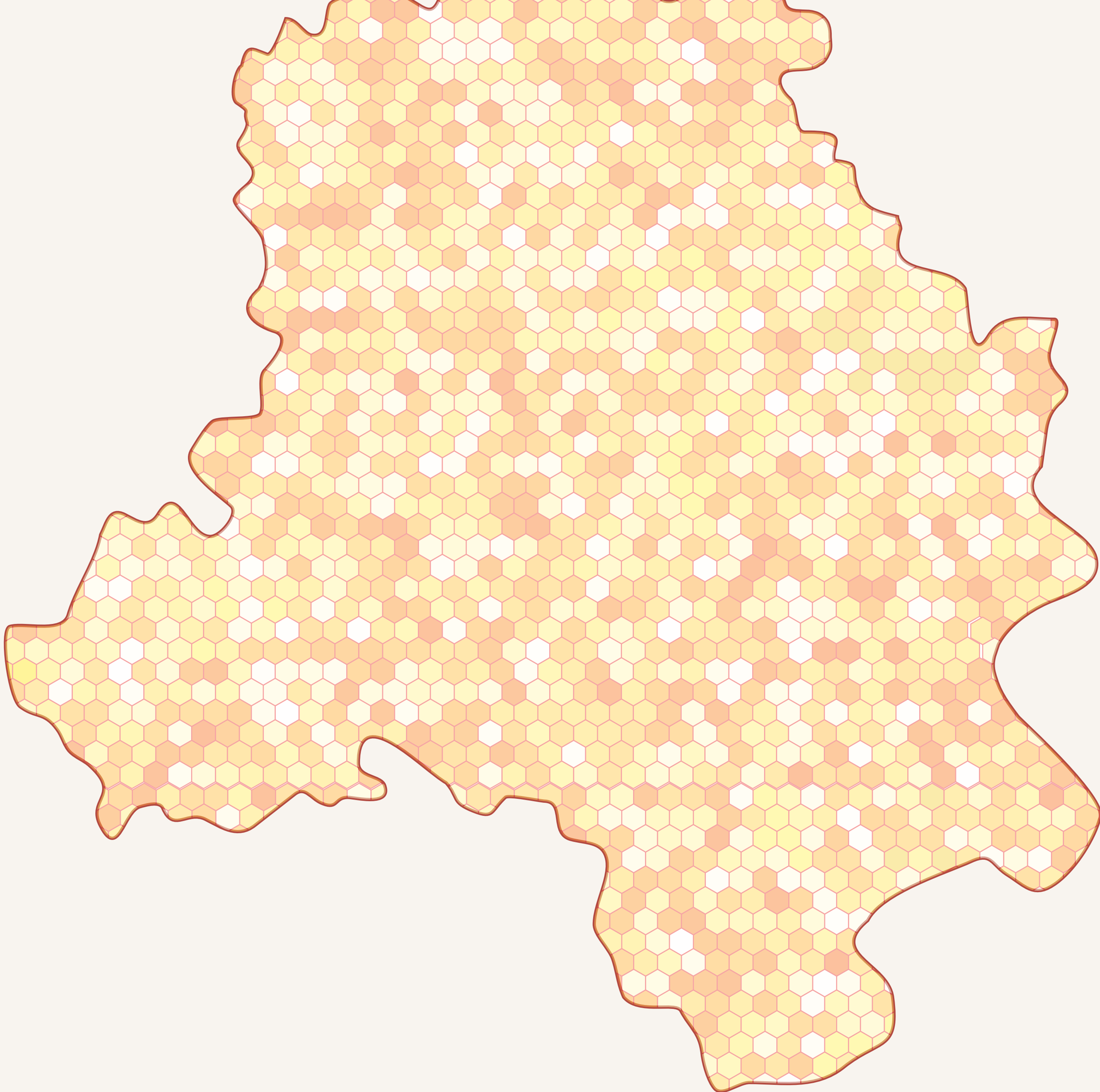
A **SINGLE AREA** of interest

Real world applications

Criticality

Field of movement

Bottlenecks



DAY OF WEEK



Mon Tue Wed Thu Fri Sat Sun

TIME OF DAY



8-12 12-5 5-9 9-2

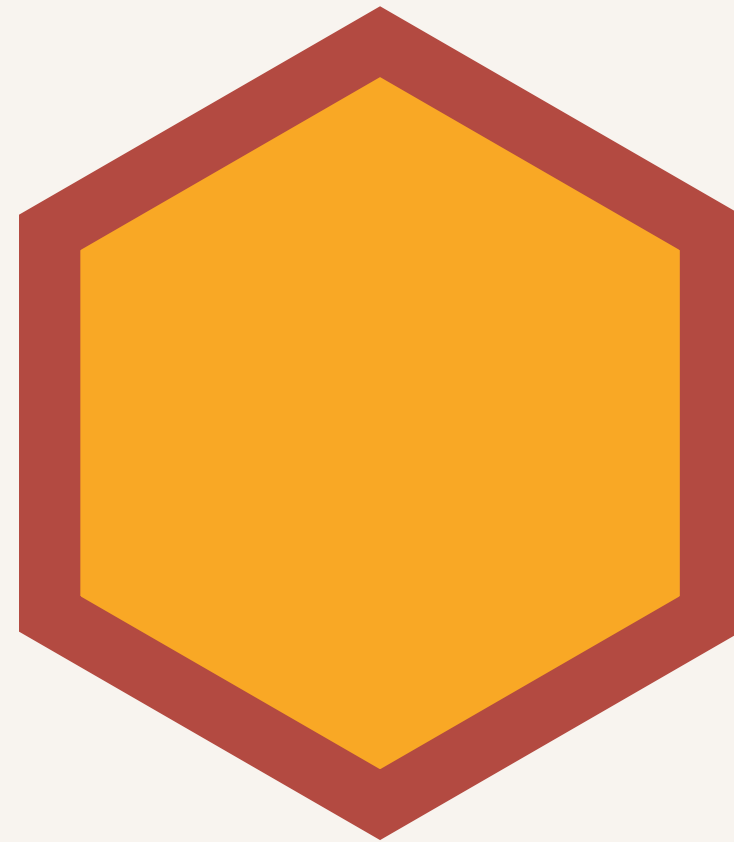
DISTANCES



3 6 9 12 15 20

AREA TYPE

- ☐ Residentials
- ☐ Parks
- ☐ Commercial
- ☐ Railway
- ☐ Hospital
- ☐ Airport

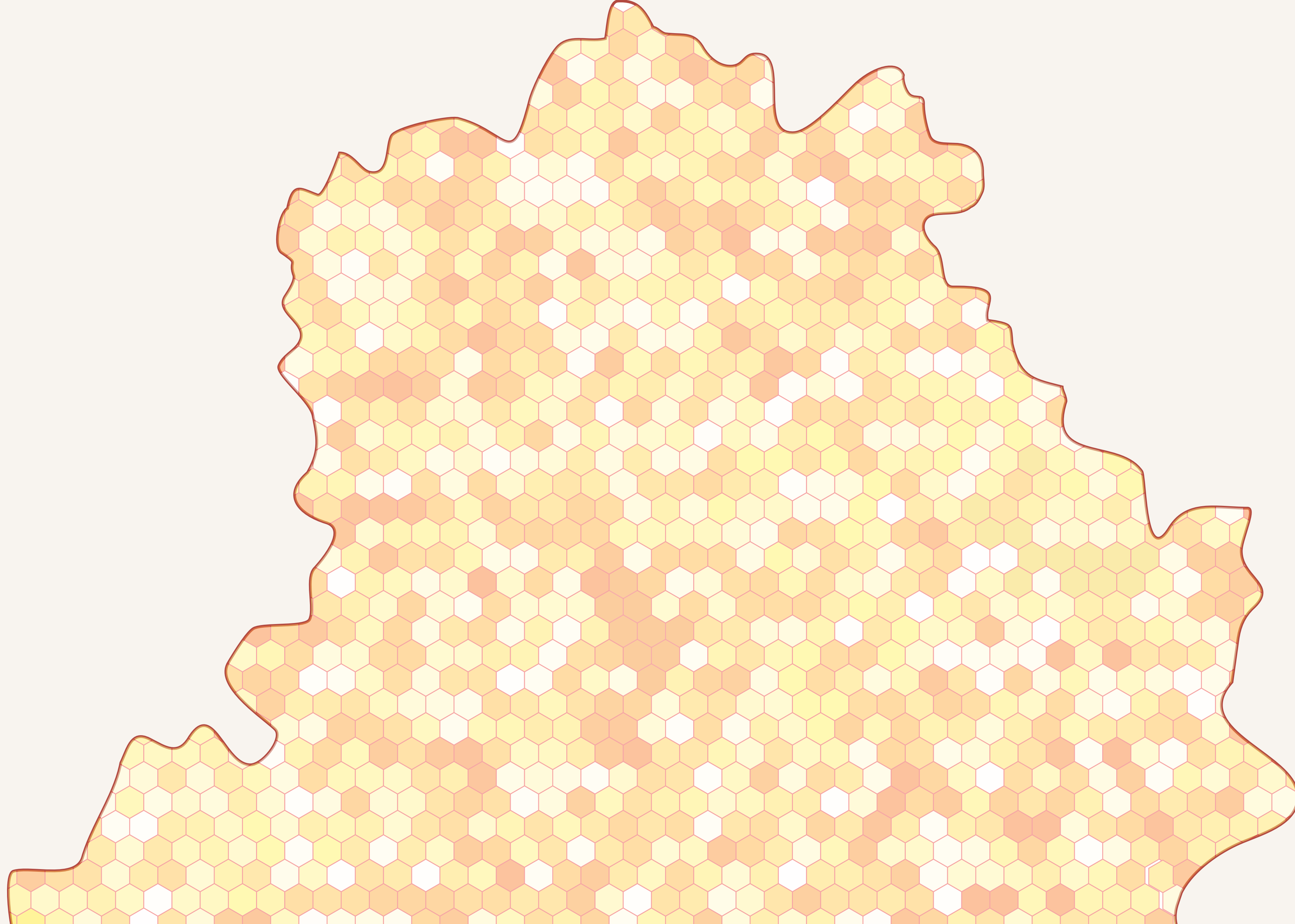


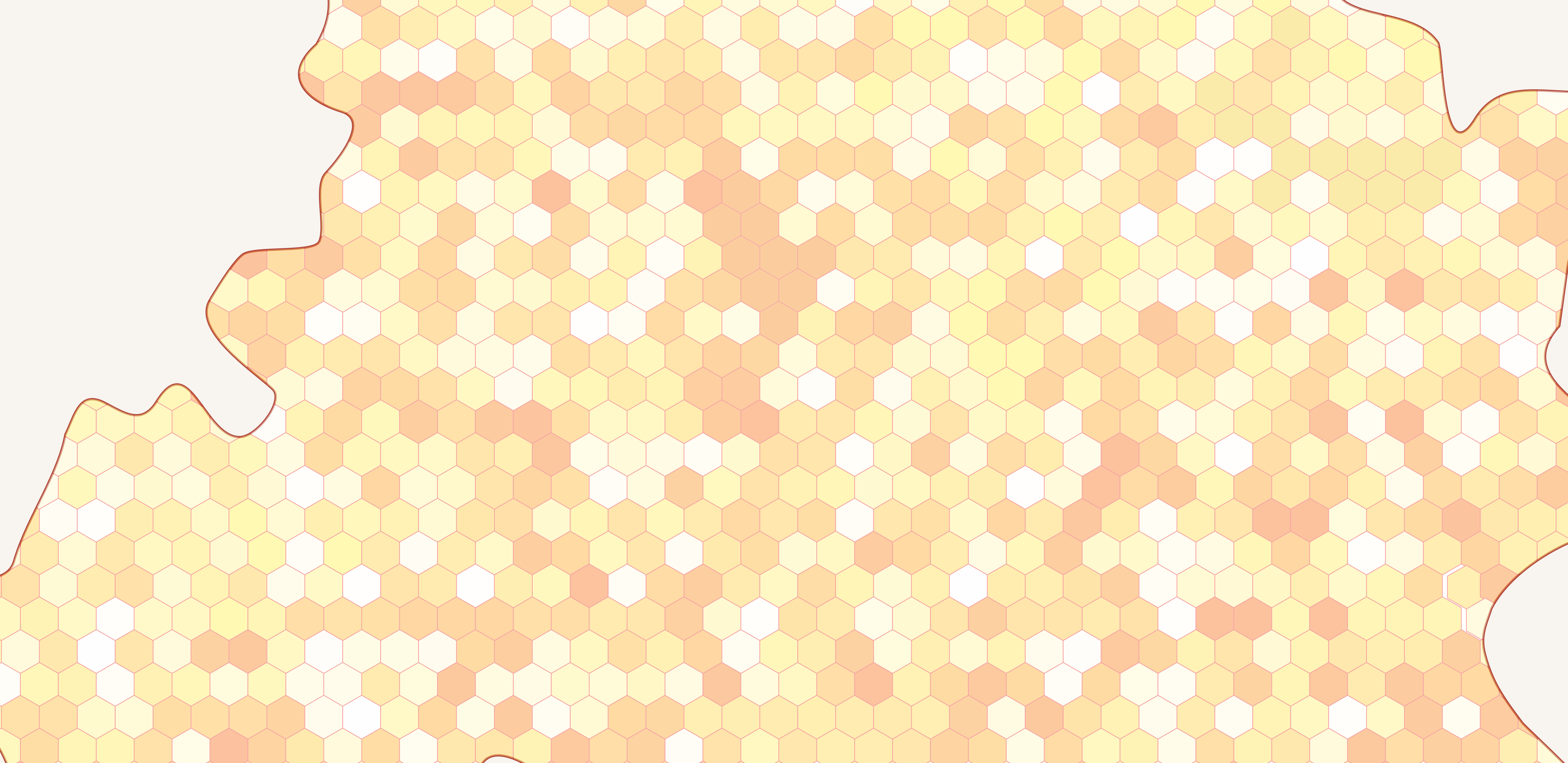
Covers a pre defined area - ~ 3kms

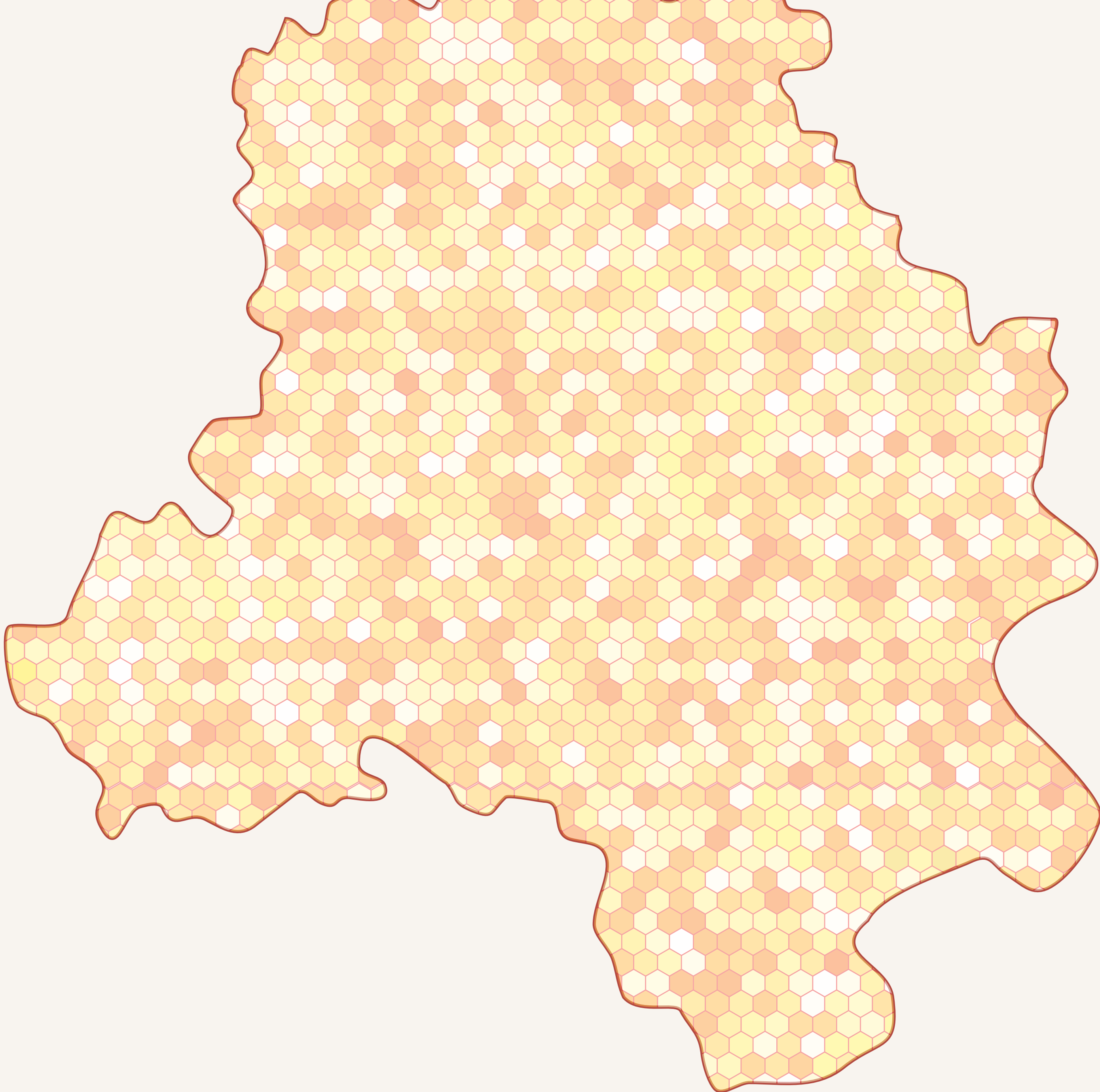
Color coded to reflect the excess travel time

Include different land uses; school, residential etc

time calculated from one tile to another







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DISTANCES



3

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DAY OF WEEK



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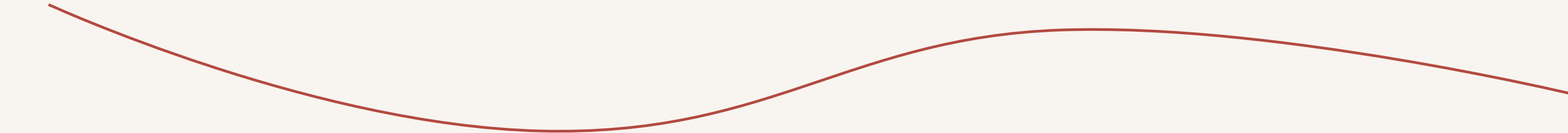
Thu

Fri

Sat

Sun

TIME OF DAY



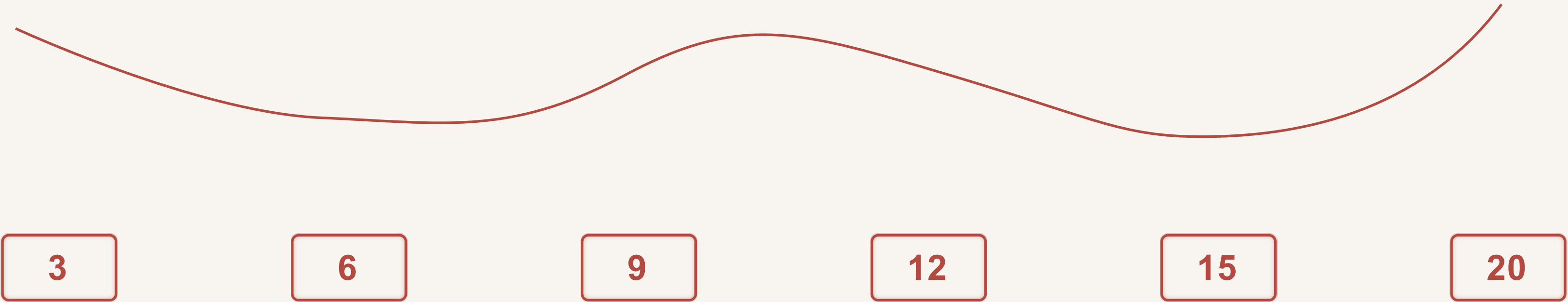
8-12

12-5

5-9

9-2

DISTANCES



AREA TYPE

☐ Residential

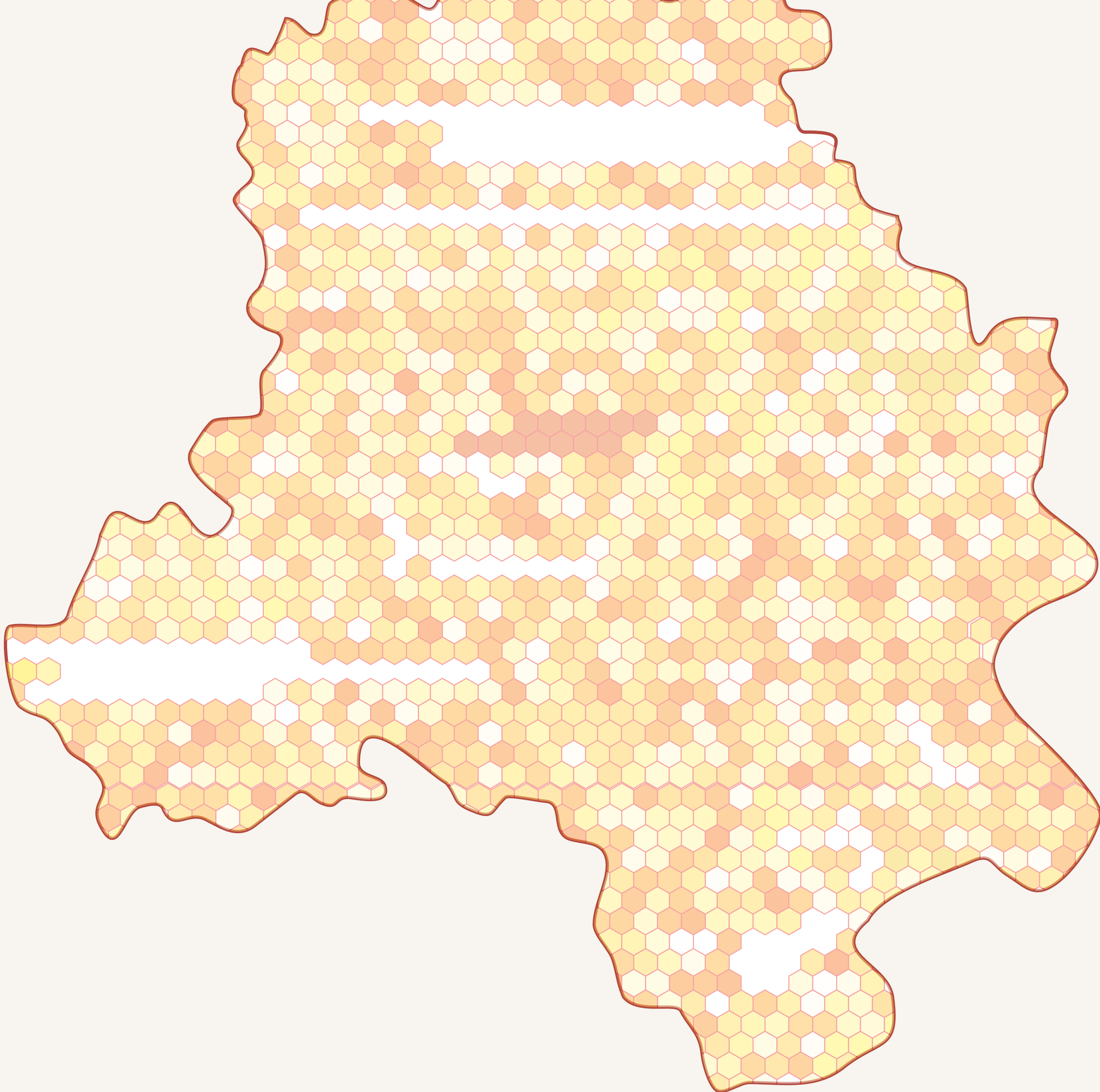
☐ Parks

☐ Commercial

☐ Railway

☐ Hospital

☐ Airport



Monday

+

5 - 9pm

+

~ 9kms

+

Commercial

DAY OF WEEK



TIME OF DAY

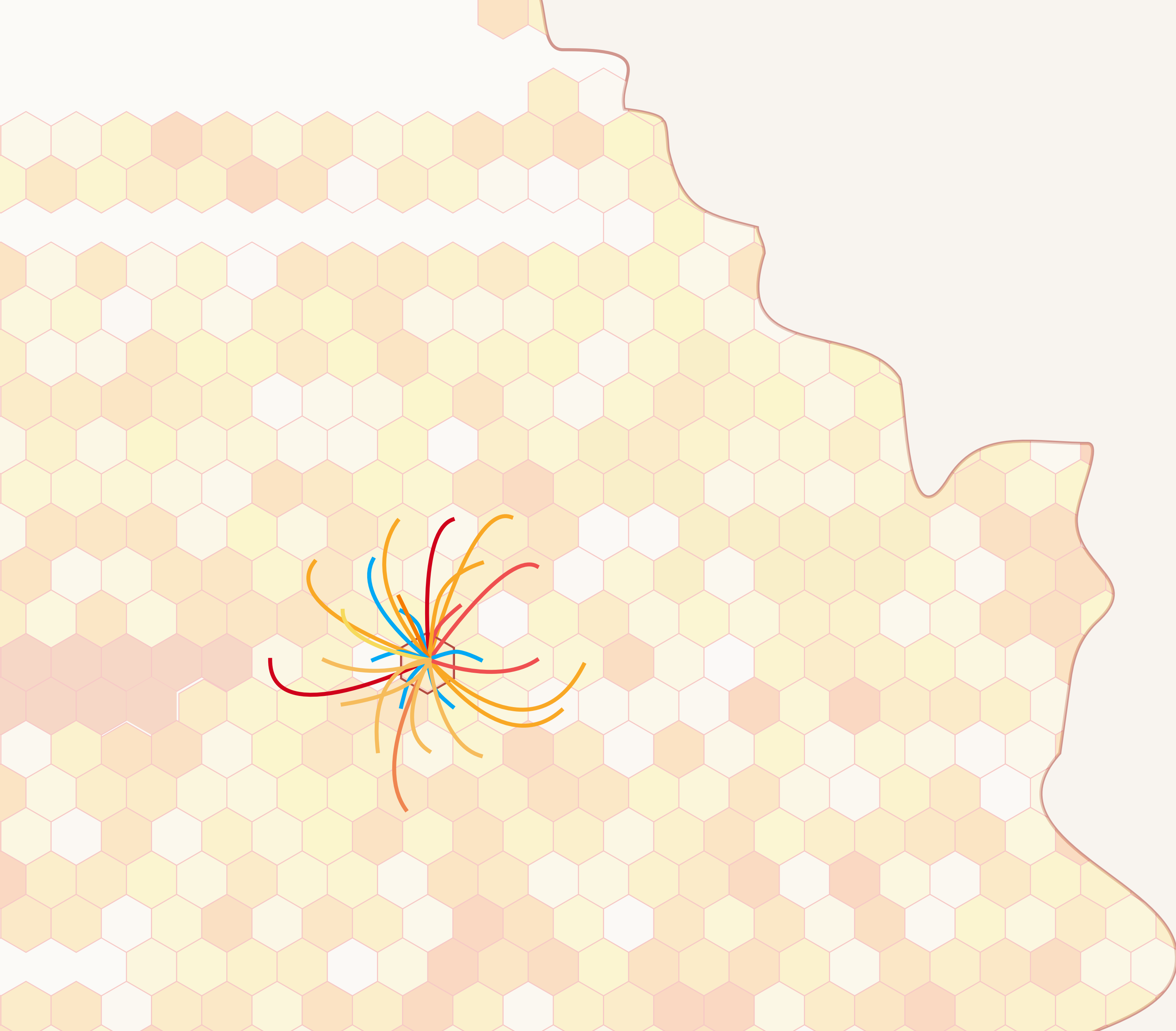


DISTANCES



AREA TYPE

- | | |
|--|----------------------------------|
| <input type="checkbox"/> Residential | <input type="checkbox"/> Parks |
| <input checked="" type="checkbox"/> Commercial | <input type="checkbox"/> Railway |
| <input type="checkbox"/> Hospital | <input type="checkbox"/> Airport |



Monday

+

5 - 9pm

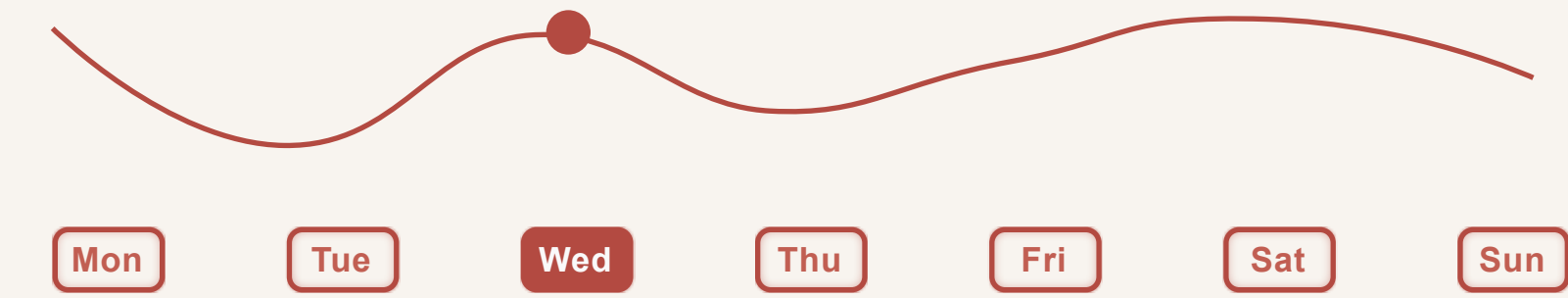
+

~ 9kms

+

Commercial

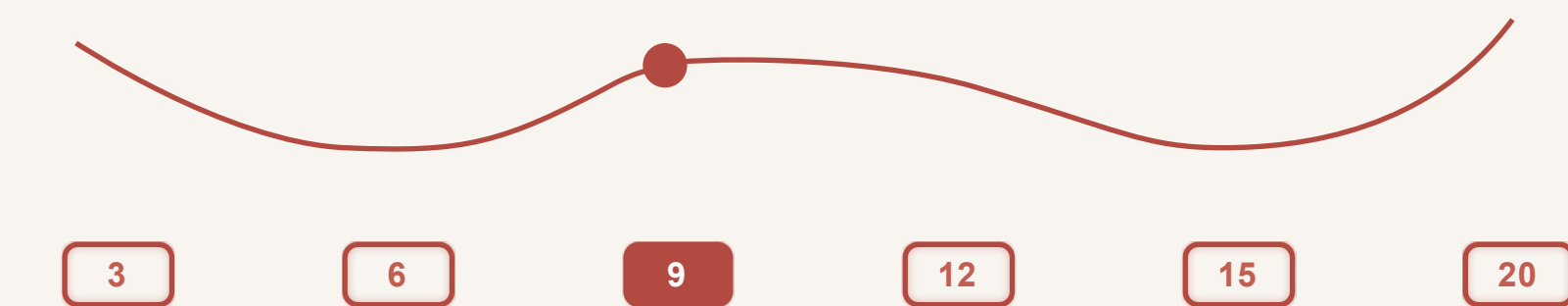
DAY OF WEEK



TIME OF DAY



DISTANCES



AREA TYPE

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- ☒ Commercial
- ☐ Hospital
- ☐ Parks
- ☐ Railway
- ☐ Airport

Data collection

OSM Data - geojson format data for different types of areas in Delhi.

Google Directions API - calculate time to travel from one point to another

QGIS - calculate bounds of Delhi and also identify / fix missing pieces

turf.js - geo spatial analysis.