

# **A Three Typology Matrix in Alleviating Traffic Congestion in The Inner City of Wiener Neustadt(Grazer-Ungargasse Neuklosterplatz Road Arteries)**

## **1 Introduction**

Wiener Neustadt is a small town outside the precincts of The city of Vienna. Its close proximity to the capital in which it shares many economic and transportation links projects it as quasi extension of Suburban Vienna.

A small town even by Austrian Standards, Wiener Neustadt is relatively free of traffic congestion in sharp contrast to the bustling city of Vienna. Nonetheless the traffic and pedestrian zone adjoining the heart of the city is often inundated with heavy vehicular traffic especially the main artery road of Grazer Straße.

There has been a continuous problem of acute traffic congestion and heavy vehicular traffic on Grazer Straße especially on the two peak shoulders of the day from motorists coming from the direction of Ungargasse. The epicenter of the problem has been the junctions linking Ungargasse to Grazer Strabe and Ungargasse and Neuklostergasse as well as the junction linking Grazer Strabe and Neuklosterplatz.

Our primary task was to alleviate this acute congestion and ensure the smooth flow of traffic within the vicinity of the inner city by redesigning the road network within the catchment area of these three roads and ensuring that in the long term public transport is priotise within an ambit of a car-free pedestrian-friendly environment.



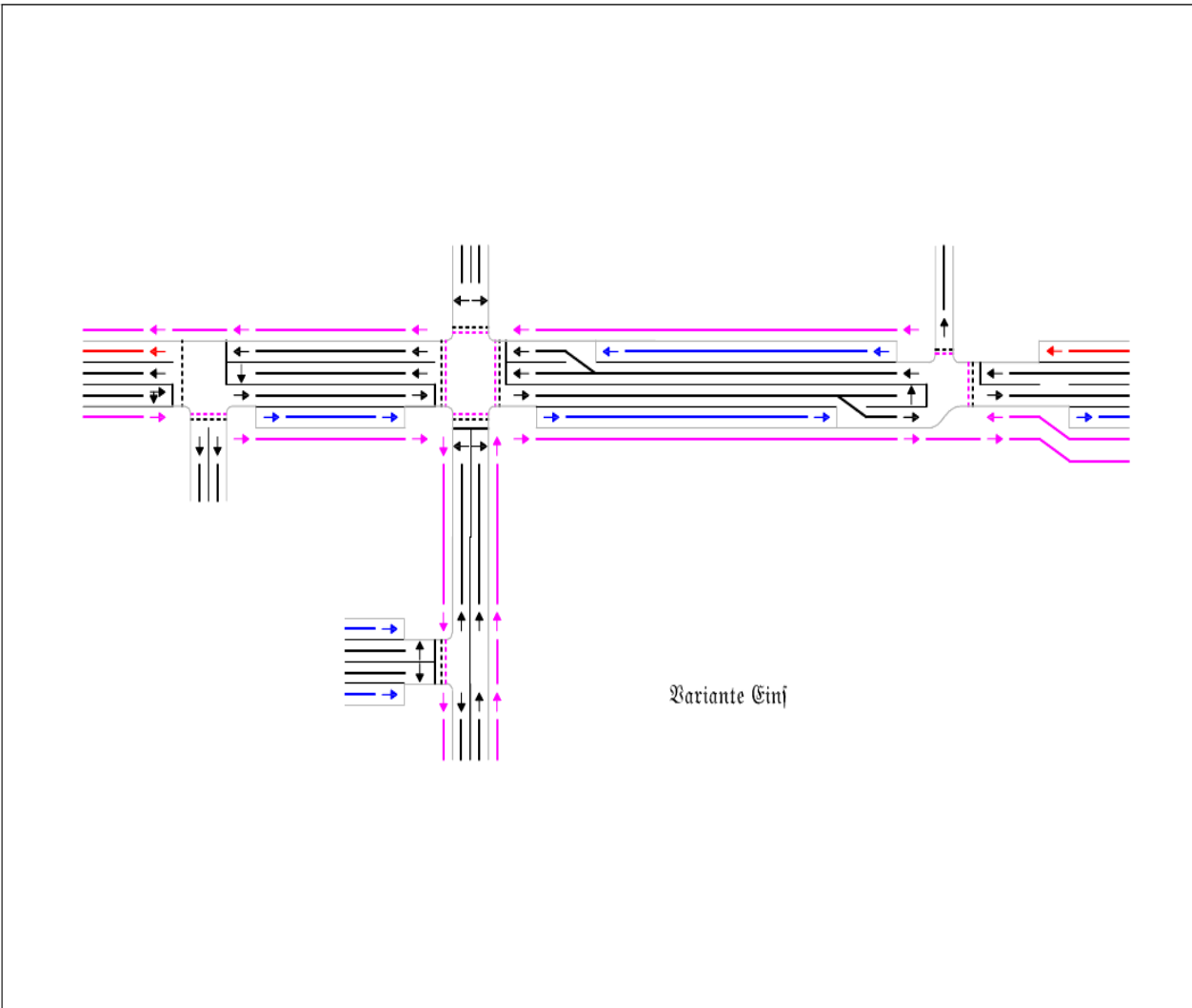
## 2 Unearthing a Solution

In this vein ,we developed and came out with three different variants or options that can tentatively solve the problems enumerated above and which has the potency of meeting the envisaged long-term goal of priotising public transport,drastically reducing the number of private automobiles plying especially the streets of Grazer Strabe and Ungargasse.

## 3 Variant/Typology One: The Concept of The Ring Road

This variant seeks to reduce the volume of traffic by creating a ring road around the inner city by right turns starting from Grazer Straße through Maria Theressien Ring to The Ferd-Porsche Ring to Babenberg Ring to Eyerspering Ring ,then eventually turning right again to finally link up with Grazer Straße as depicted in figure one.

**Figure 1: Variant/Typology One**



### 3.1 Features/Characteristics

This design typology has some defining features or characteristics which are enumerated below.

- Two bike routes on opposite sides of the road

- Two lanes for private cars
- One exclusive bus lane

### 3.2 Advantages and Disadvantages

It is prudent that we do highlight the inherent advantages and disadvantages in this design option in order to guide the implementing agencies on the range of choices available to them as well as the merits and demerits associated with each design typology. It is primarily useful to aid them to make the optimal choice based upon the priorities envisioned in the Transport Master Plan for the city of Wiener Neusatz.

### 3.3 Advantage

- It can potentially reduce the volume of traffic in the inner city by facilitating traffic circulation

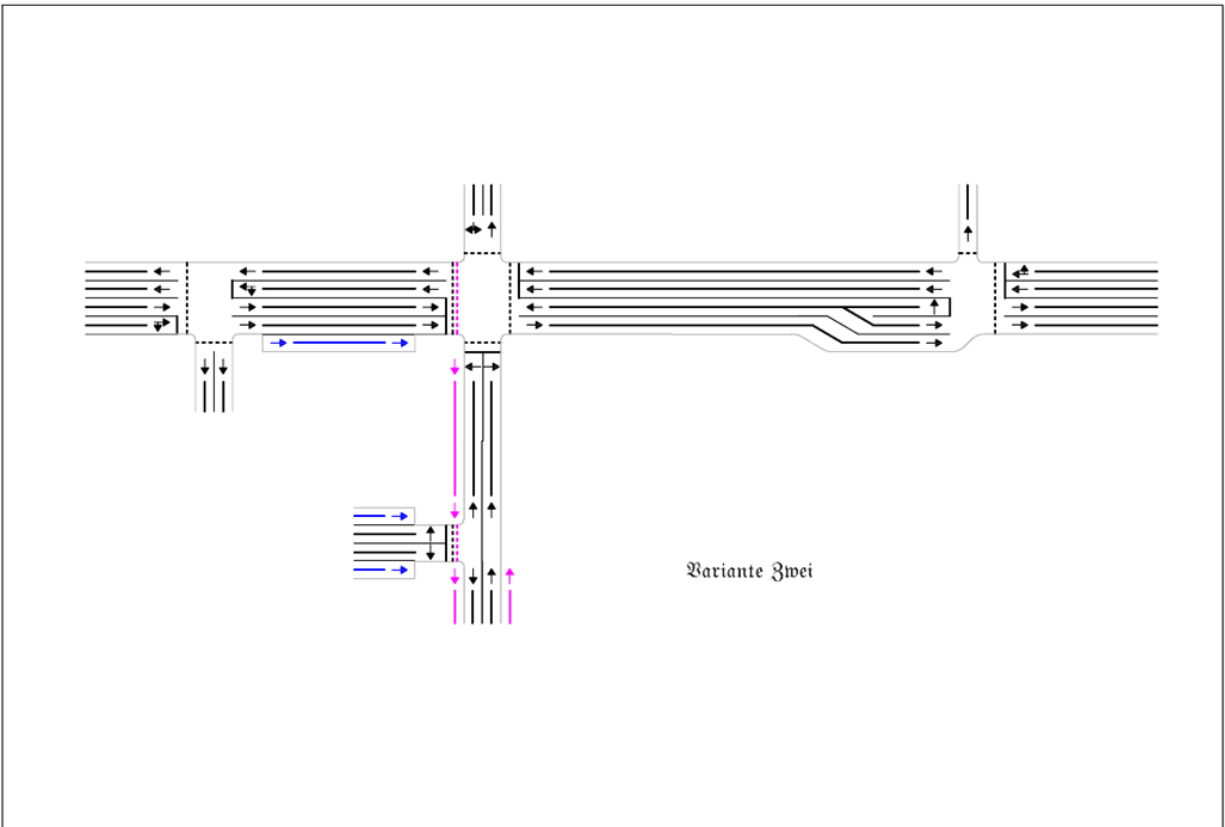
### 3.4 Disadvantage

- It does not however reduce the volume of traffic on the two principal arteries, Grazer Straße and Ungargasse

## 4 Variant/Typology Two: Eversper Ring-Grazer Straße

The circulation of this route starts from the roundabout adjoining Eversper Ring, it turns right to link up with Grazer Straße, then it turns left to Neuklosterplatz, it then navigates left to Neuklostergasse where it either turns left or right to link up with Ungargasse where there is the alternative left or right turn to link up with Grazer Straße again.

**Figure 2: Variant/Typology Two**



#### 4.1 Features/Characteristics

- One lane per each direction
- Two bike routes on both sides of the road
- Parking lane
- Bus priority system on all the routes

#### 4.2 Advantages/Strengths

- Provision of parking lanes
- Prioritisation of public transport via buses
- Reduction in traffic volume on the two key arteries ;Grazer Straße and Ungargasse

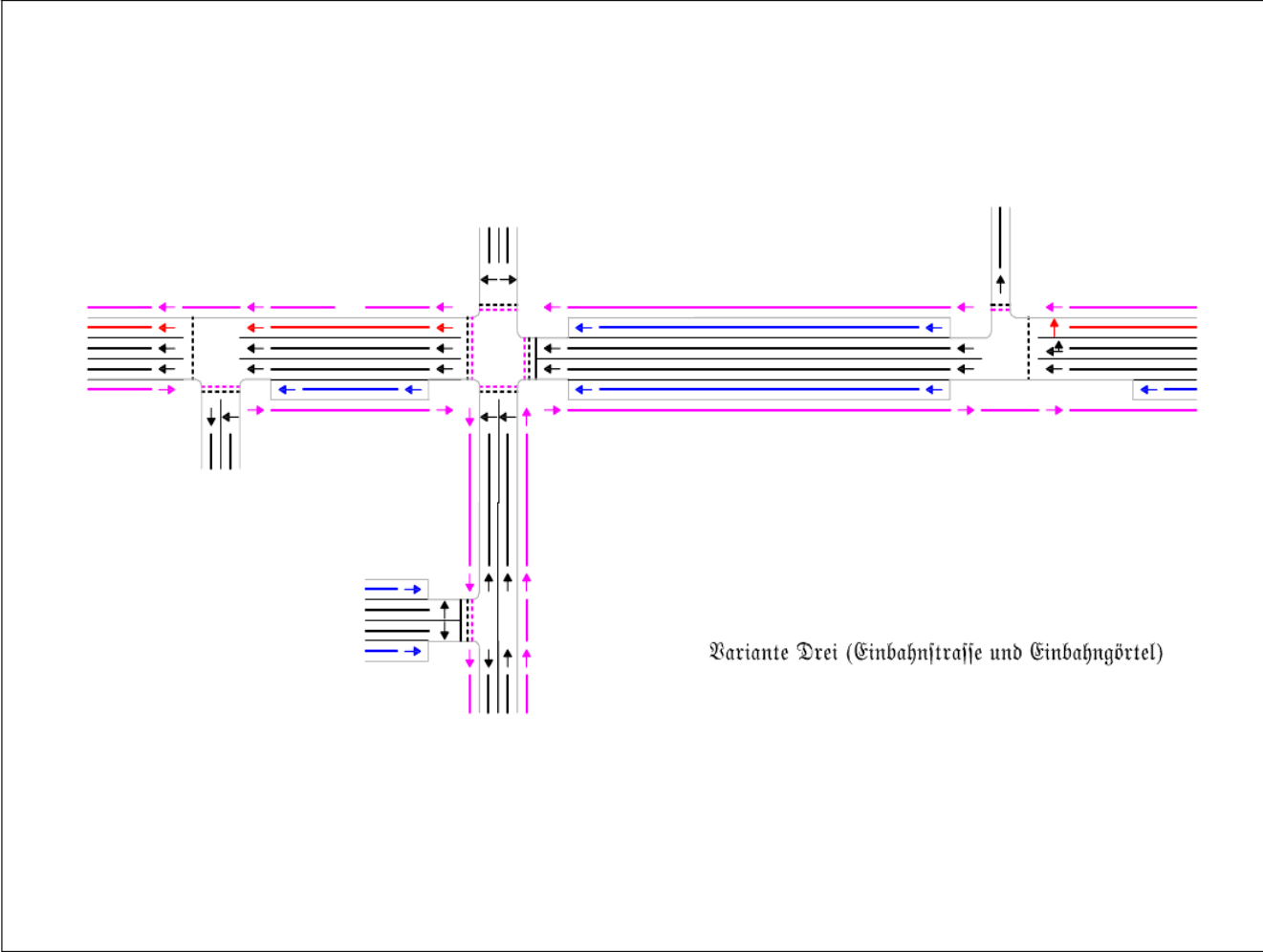
#### 4.3 **Disadvantages/Weaknesses**

- Automobile usage of Grazer Straße especially and Ungargasse is not drastically reduced
- It might not be a long term solution to the chronic traffic congestion problem in the inner precincts on the city.

### **5 Typology/Variant Three :Grazer Strabe-Ungargasse**

It essentially follows the same circulation route as the Typology/Variant Two but the principal difference is that in this typology bus routes are provided.

Figure 3: Variant/Typology Three



## 5.1 Features/Characteristics

- One bus lane
- Two lanes for private automobiles
- Two bike lanes on opposite sides of the road
- Parking along some sections of Grazer Straße

## 5.2 Advantages/Strengths

- Provision of a bus route
- Parking along some sections of Grazer Straße

## 5.3 Disadvantages/Weaknesses

- It might not reduce the overall traffic volume due to the provision of two lanes for private automobiles
- It is not pedestrian-friendly since there is very little space for a walkable or car-free environment

# 6 Conclusion

A summary reflection of the three typologies reveals that it has the potential of improving the overall dense traffic volume especially on the two key arteries of Grazer Straße and Ungargasse ;but it does not go far enough in making this part of the city pedestrian-friendly enough, thus the long-term radical solution might be to ban entirely the use of private cars in the inner city which will indirectly enhance and prioritise public transport and a car-free pedestrian-friendly environment.



