

A photograph of a modern building with a large set of stairs leading up to the entrance. The building has a white facade with a grid of windows. The stairs are wide and made of grey concrete. Many people are walking up the stairs. The sky is blue with some clouds. The text 'Bicycle Parking' is overlaid on the image in a large, bold, black font with a white outline.

Bicycle Parking

Finding the perfect spot

Velocity 2017

Bicycle Parking



By using data of
*the national
cycle count week*

The context



The old prognosis of bicycle parking for Central Station

- Counting the bikes in 2006
- Estimate the growth of travelling
- Assessment for 2025
- An educated guess...
- 22.000 bikeparking spots needed
– *(14.000 East, 8.000 West)*

22.000 parking spots in progress



Partly in use ... (4.200 spots)



Part of a bigger challenge

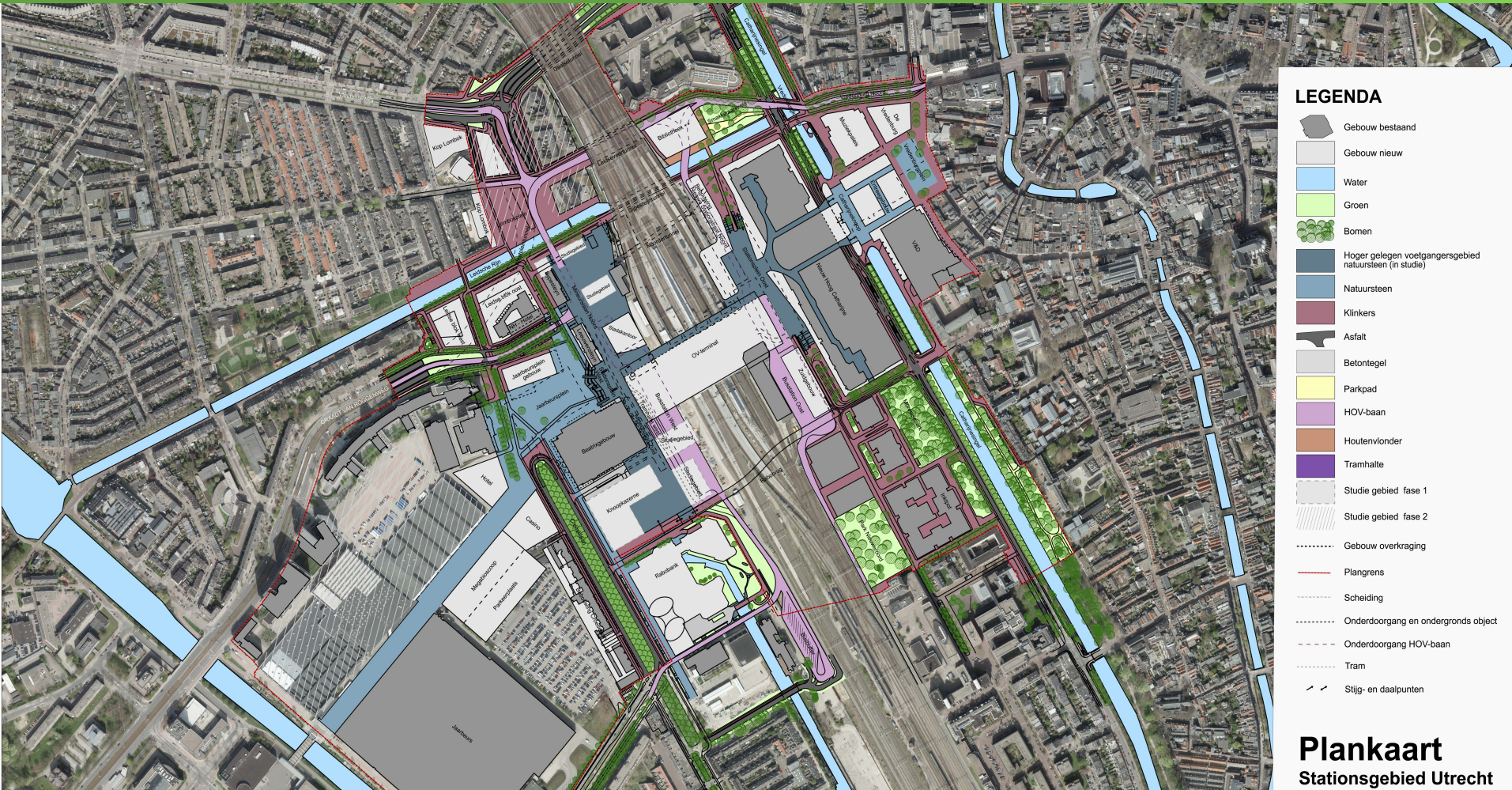


An integrated approach

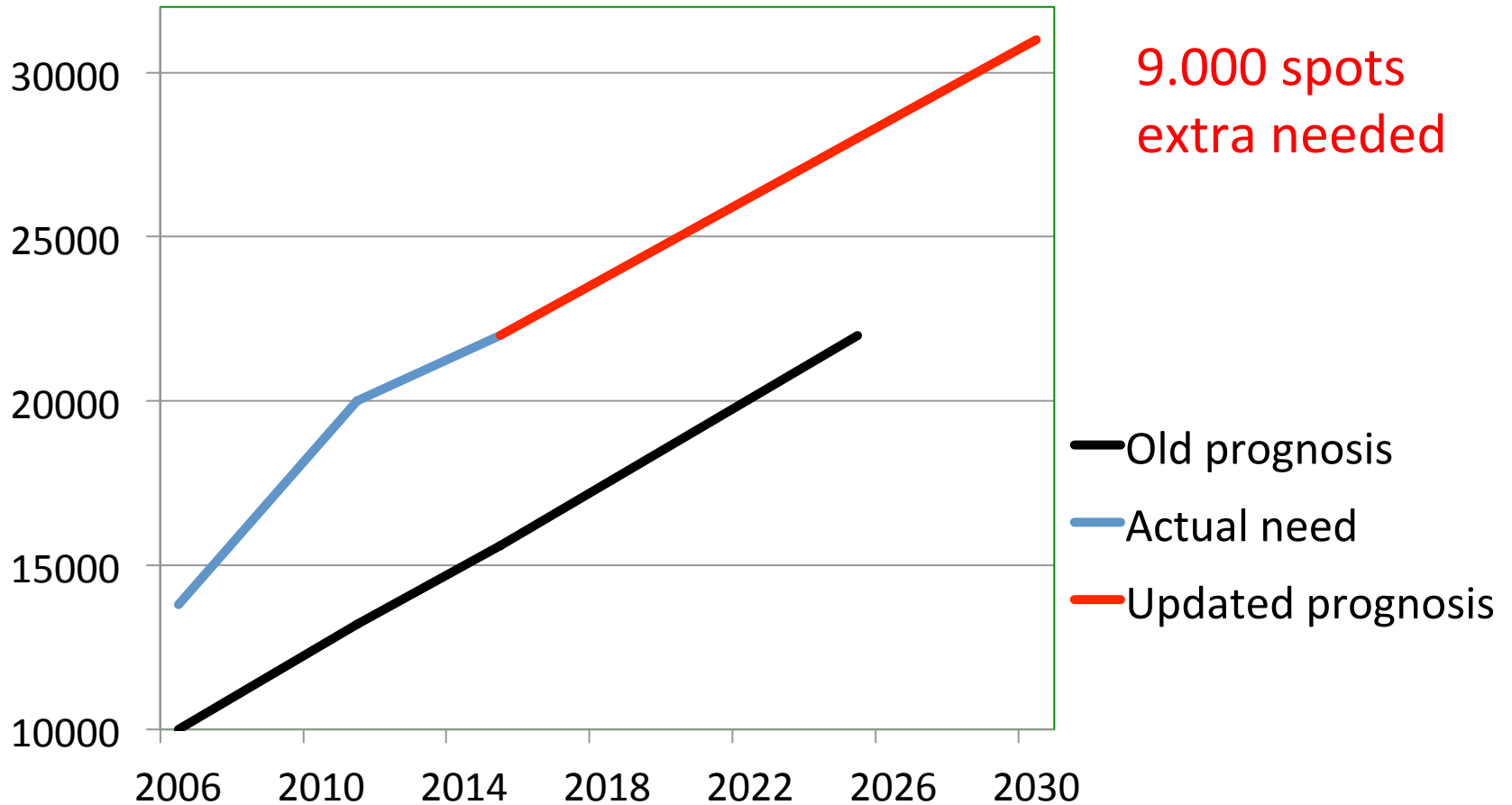
- Creating good access
- Located on the way of destination
- No detour
- Good Quality
- Safe and sound
- Quick and hasslefree
- Inviting in design



An integrated approach



Prognosis updated

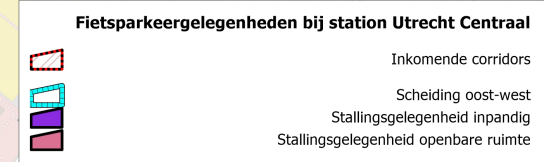
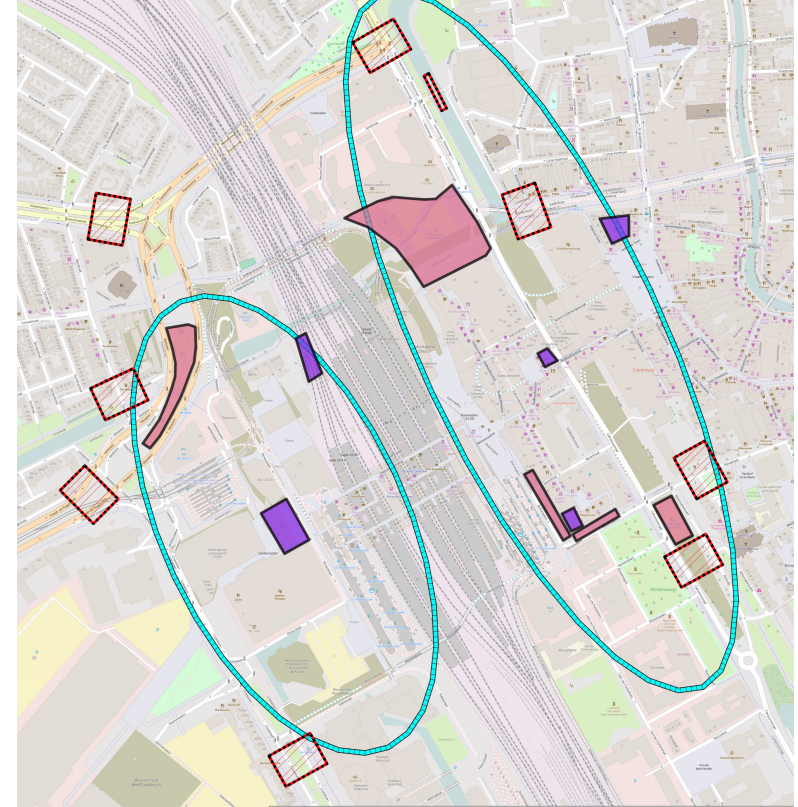
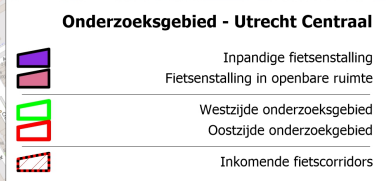
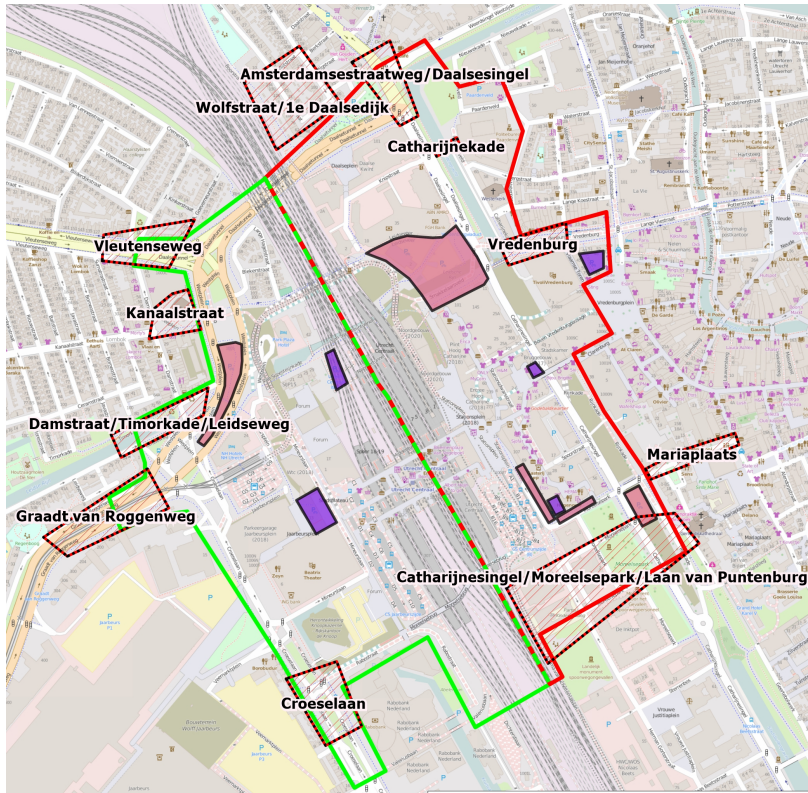


Using data of

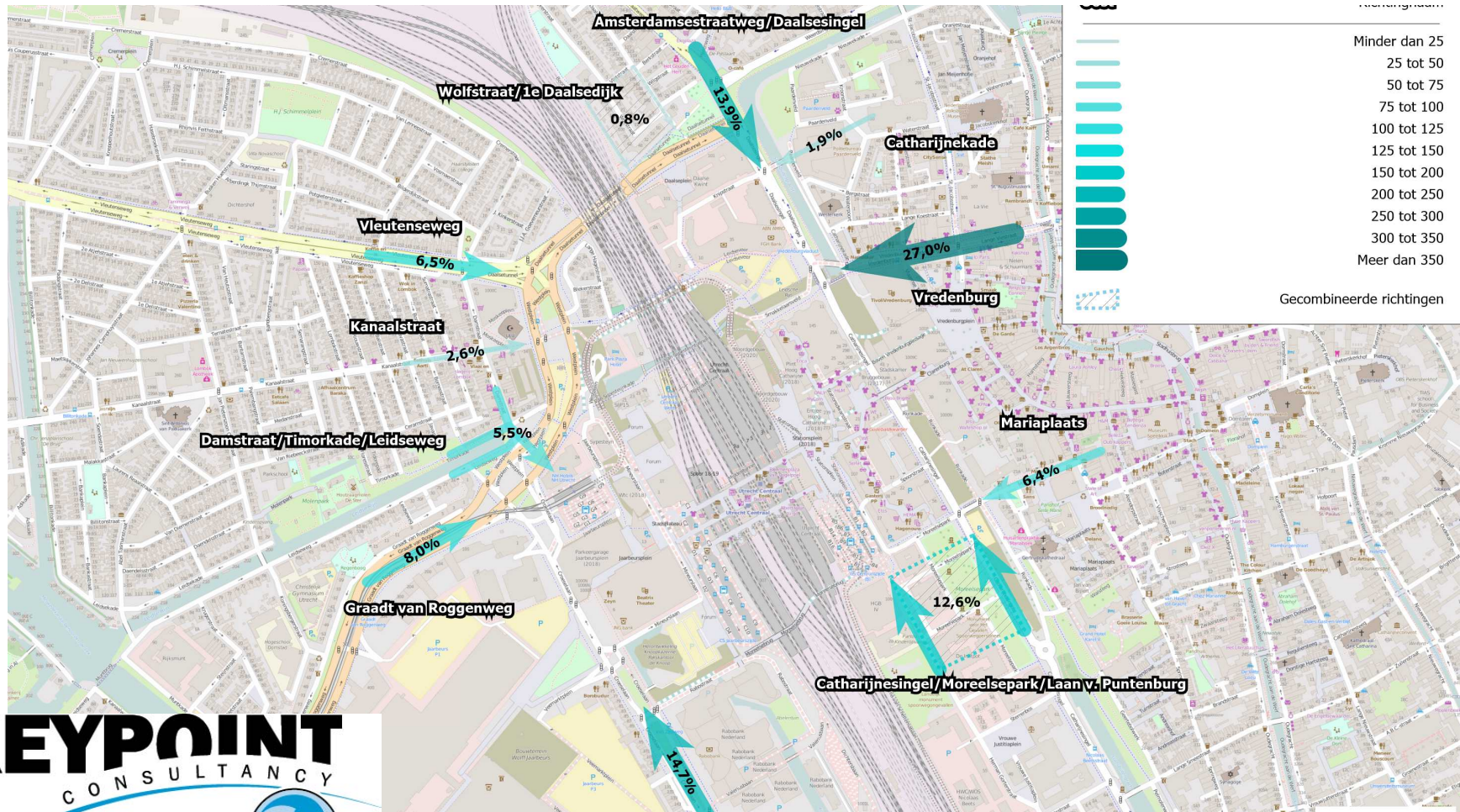


- First *national cycle week counting in 2015*
- National 55.000 participants
- Done by an app
- 2304 cyclists in research area of Utrecht (=N)
- All data anonymous

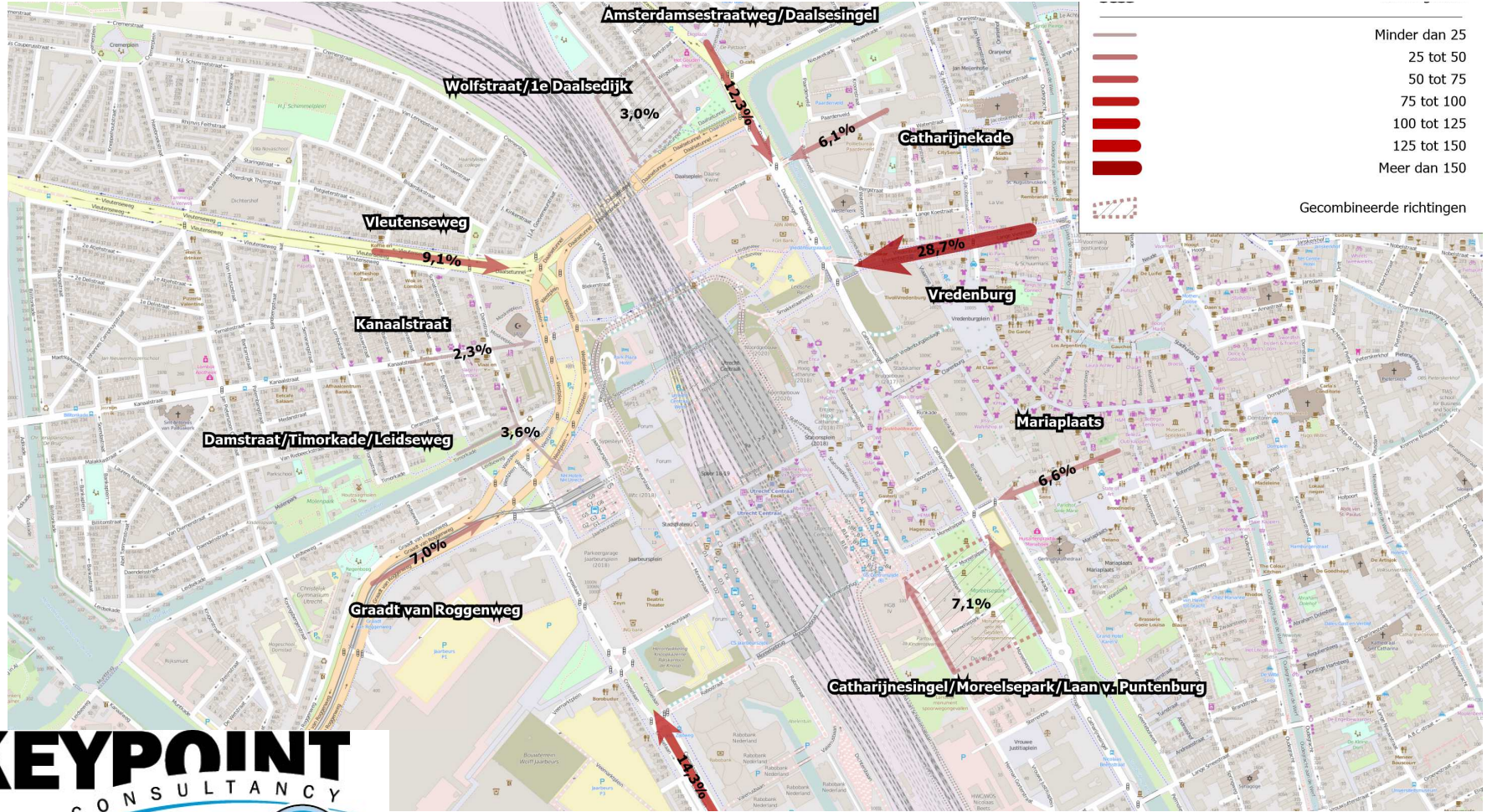
Research area



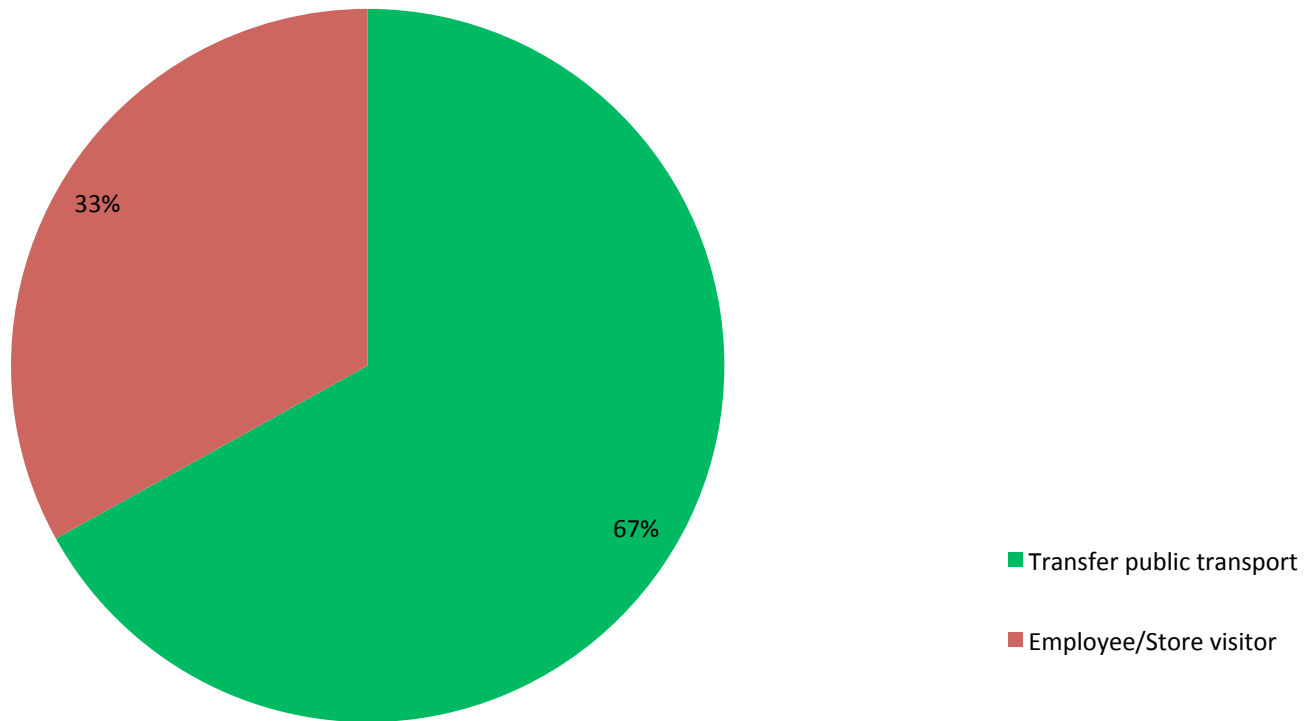
Origin of cyclists for the station



Origin of other cyclists



Journey purpose



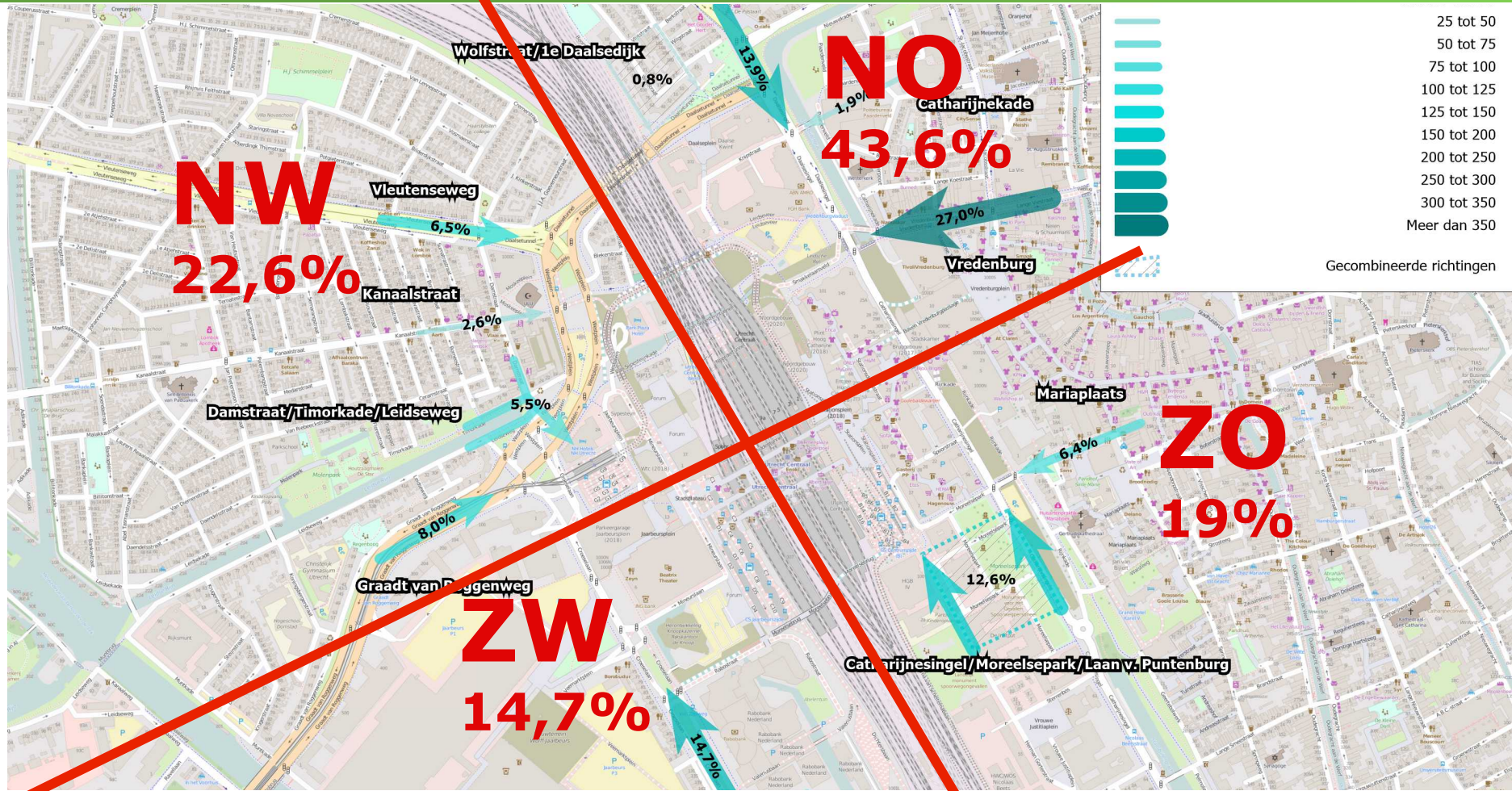
Current plans for 22.000 spots



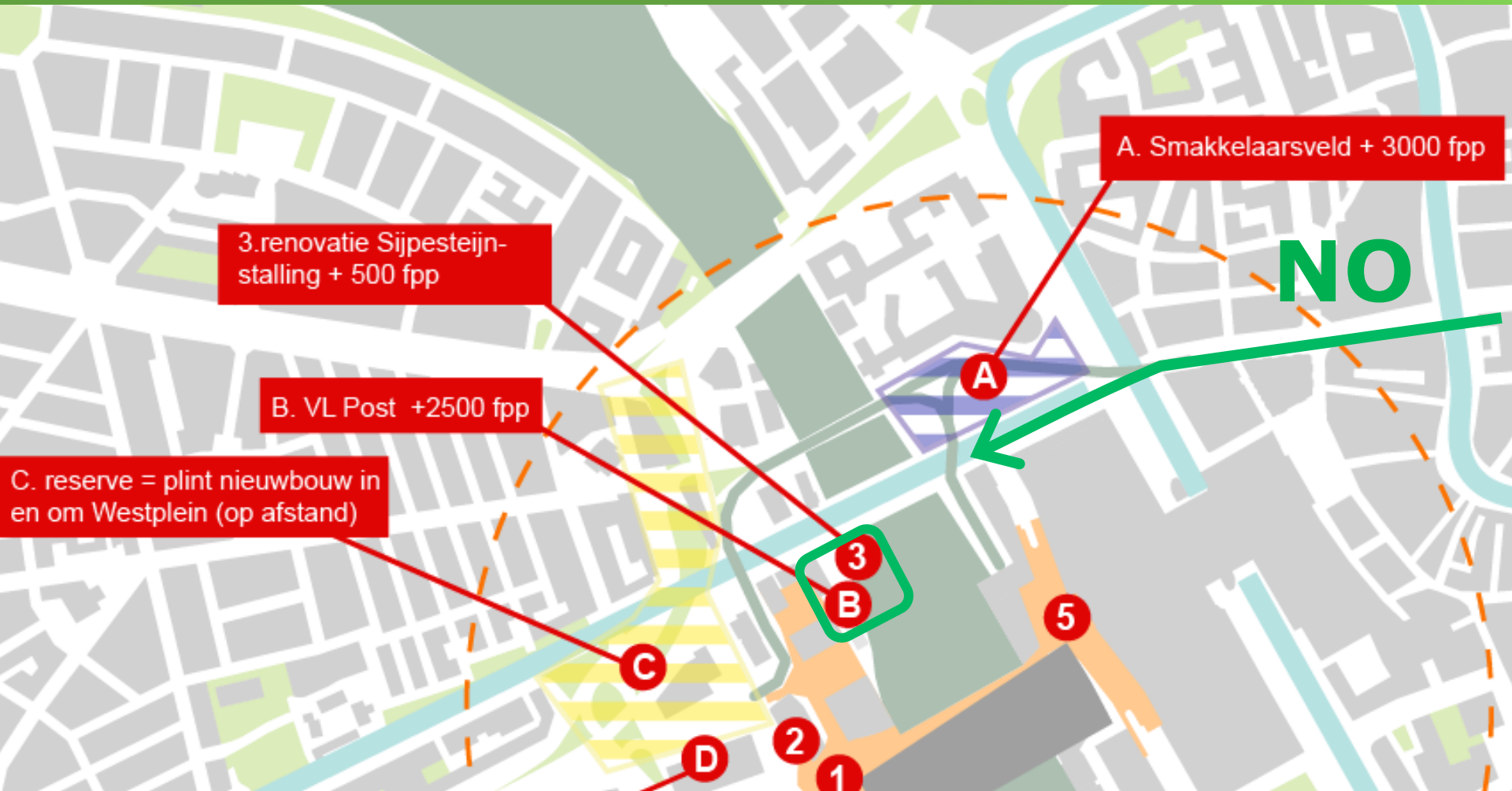
Some calculations ...

Corridor	Deelgebied	percentage	prognose 2025	prognose 2030		capaciteit plannen	TEKORT per kwadrant
Vredenburg	NO	27,0	7587	8370			
Croeselaan	ZW	14,7	4131	4557			
Amsterdamsestraatweg/Daalsesingel	NO	13,9	3906	4309			
Catharijnesingel/Moreelsepark/Laan van Puntenburg	ZO	12,6	3541	3906			
Graadt van Roggenweg	NW	8,0	2248	2480			
Vleutenseweg	NW	6,5	1827	2015			
Mariaplaats	ZO	6,4	1798	1984			
Damstraat/Timorkade/Leidseweg	NW	5,5	1546	1705			
Catharijnekade	NO	1,9	534	589			
Kanaalstraat	NW	2,6	731	806			
Wolfstraat/1e Daalsedijk	NO	0,8	225	248			
totaal		100	28100	31000			
Fietsenstallingen capaciteit							
Sijpesteinstalling	NW					500	
Stationsplein West (excl. 200 fpp t.b.v. SKU)	NW					3150	
Stationsplein West	ZW					850	
Uitbreiding WTC Stalling (gekoppeld Stationsplein West)	NW					700	
Moreelsebrug/Forum Noord	ZW					3200	
Stationsplein Oost (incl. Noorderstalling)	O					13500	
Fietsparkeerplaatsen gratis langer stallen – maaiveld					10% totaal		
NoordWest kwadrant	NW					1000	
ZuidWest kwadrant	ZW					500	
NoordOost kwadrant	NO					1000	
ZuidOost kwadrant	ZO					500	
NoordWest		22,6	6351	7006		5350	-1656
ZuidWest		14,7	4131	4557		4550	-7
NoordOost		43,6	12252	13516		9110	-4406
ZuidOost		19,0	5339	5890		5890	0
	check	100	28072	30969		24900	-6069

Distribution per quadrant for 31.000



5.900 spots at NO needed



Assumptions made for solution

24-hrs-for-free

- High quality
- Indoor
- Short distance

Free parking

- Ground level or open-air building
- Not guarded
- 400 m distance



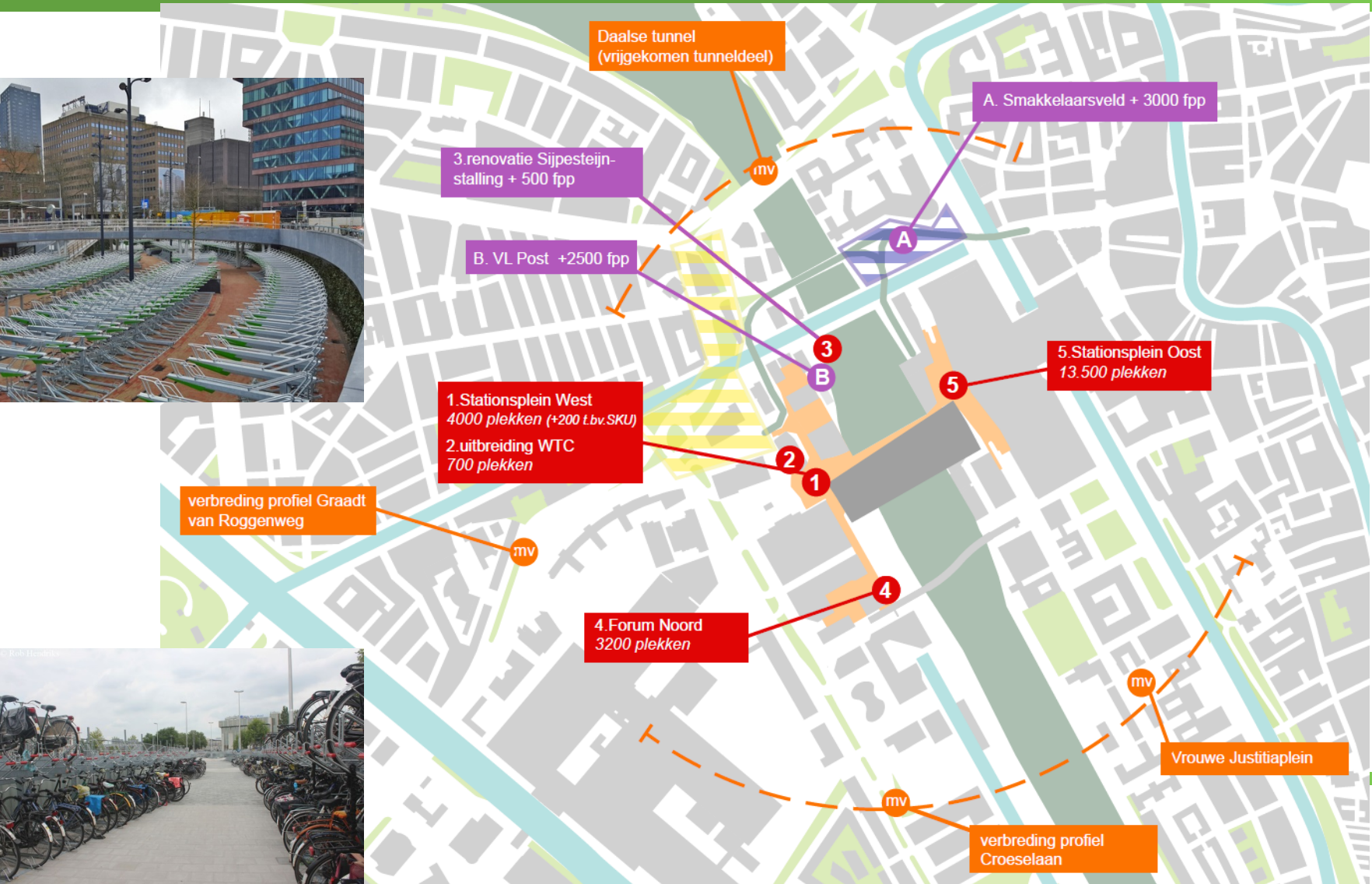
Different scenarios

1. 10% ground level parking
2. 10% open-air constructions (fietsflat)
3. All indoor facilities

Scenario 1; 10% ground level



Example of scenario 1



Scenario 2; 10 % open-air construction



3. Sijpesteijninstalling
500 plekken

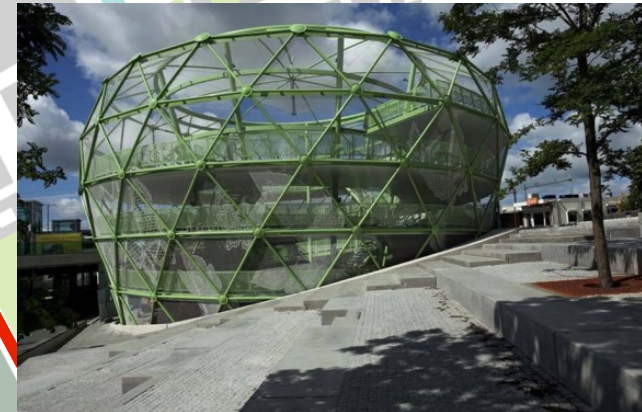
NW
Additional 1650 fpp
Open air 1500 fpp

1. Stationsplein West
4000 plekken (+200 t.b.v. SKU)
2. uitbreiding WTC
700 plekken

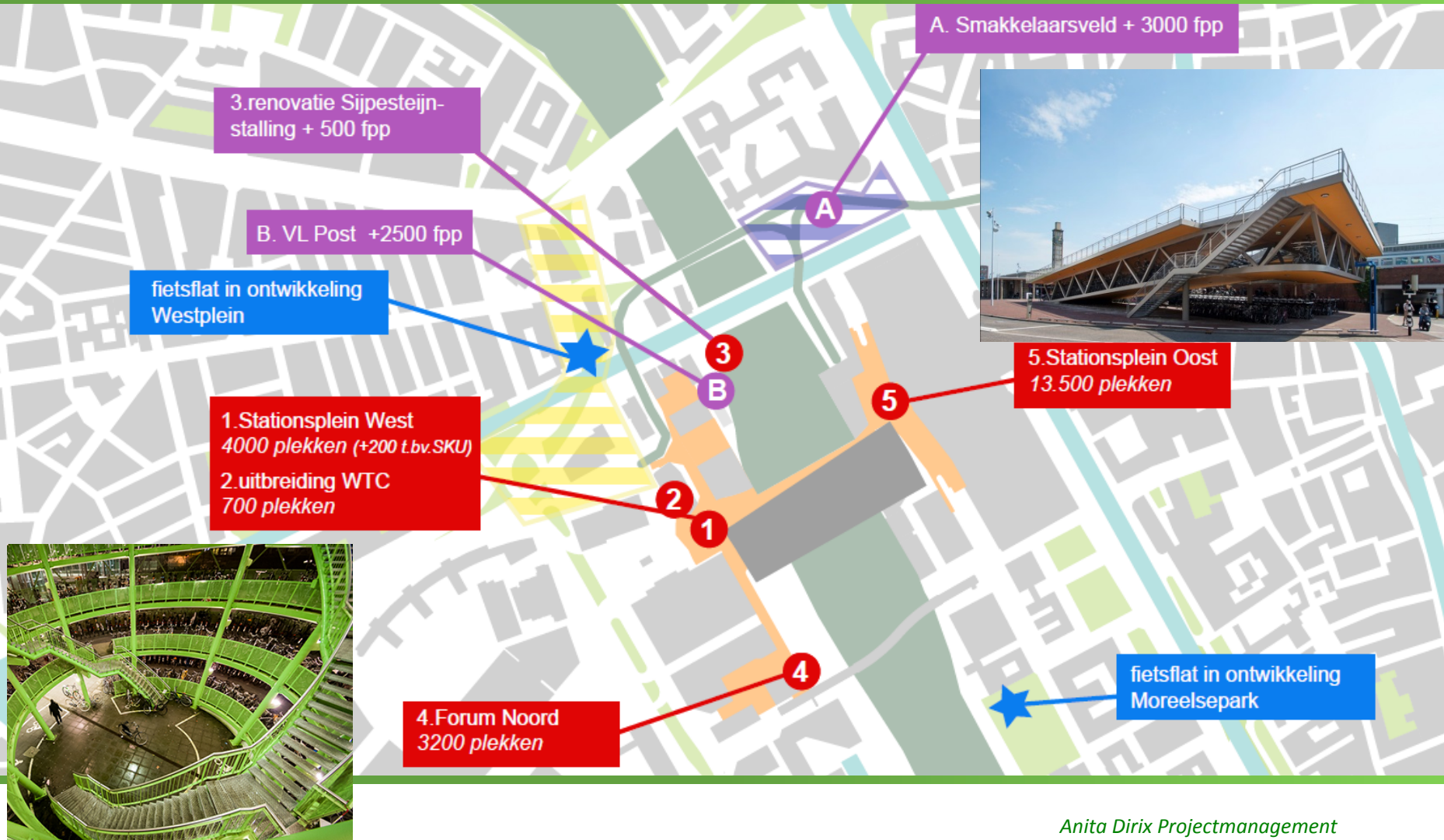
4. Forum Noord
3200 plekken

NO
Additional 4400 fpp
Open air 1500 fpp

5. Stationsplein Oost
13.500 plekken



Example of scenario 2



Scenario 3; all indoor solutions



So finally

- The best locations were indicated;
- And a correction of the old prognosis;
- Timely done the possibility to integrate in local area development;
- Saving money to prevent trial & error;
- Measurement brings knowledge!

Any questions?

