Rijkswaterstaat
Ministerie van Verkeer en Waterstaat

Mobility Management & Road Works in The Netherlands

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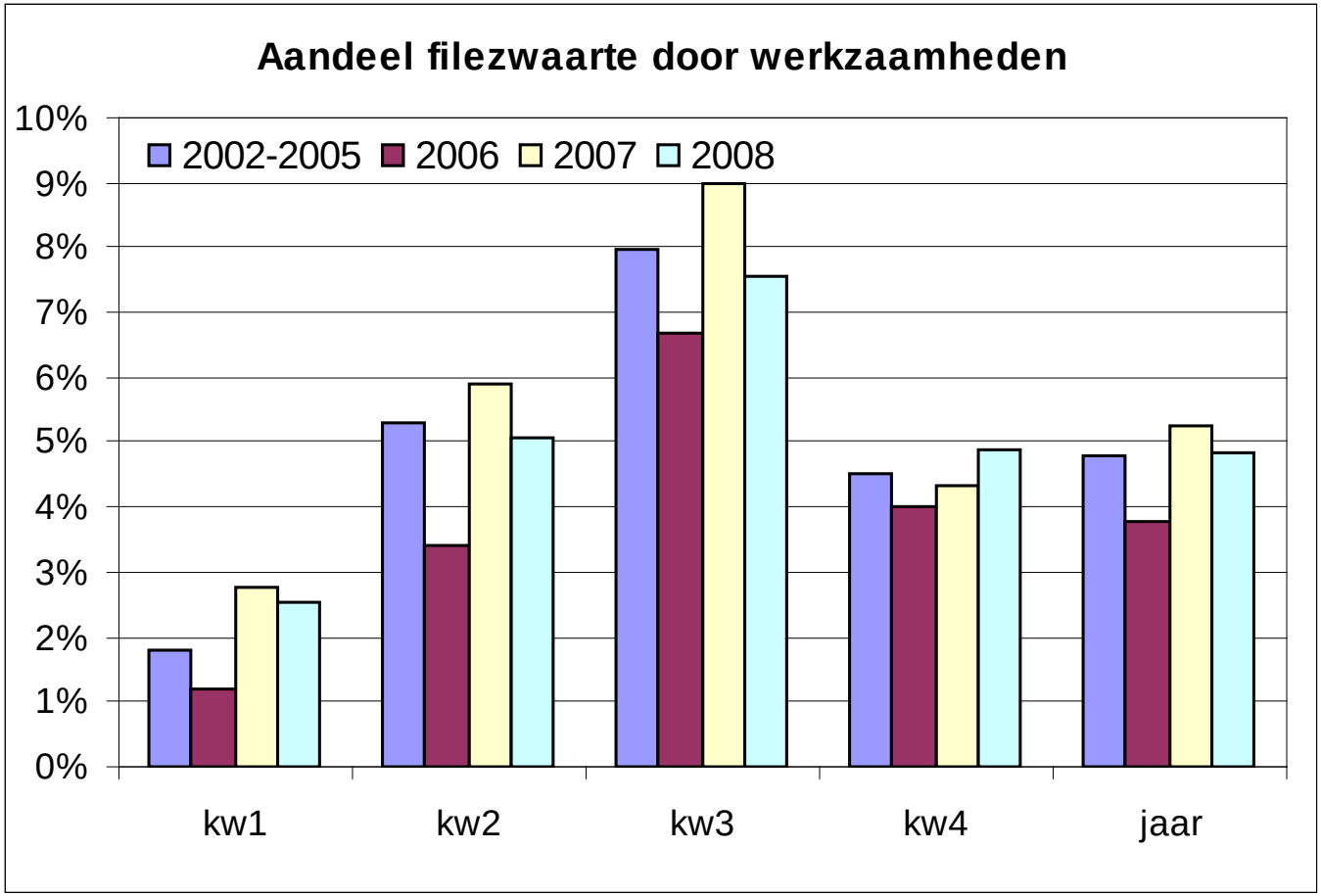
Roadworks: the challenge for RWS

- 1300 km resurface works 2005 – 2008…
- € 600 mln extra works till 2010
- 500 extra projects 2006 – 2008
- Target: < 6 % added congestion
- *Note: for RWS improving reliability/curbing recurrent congestion is NOT a performance indicator!*

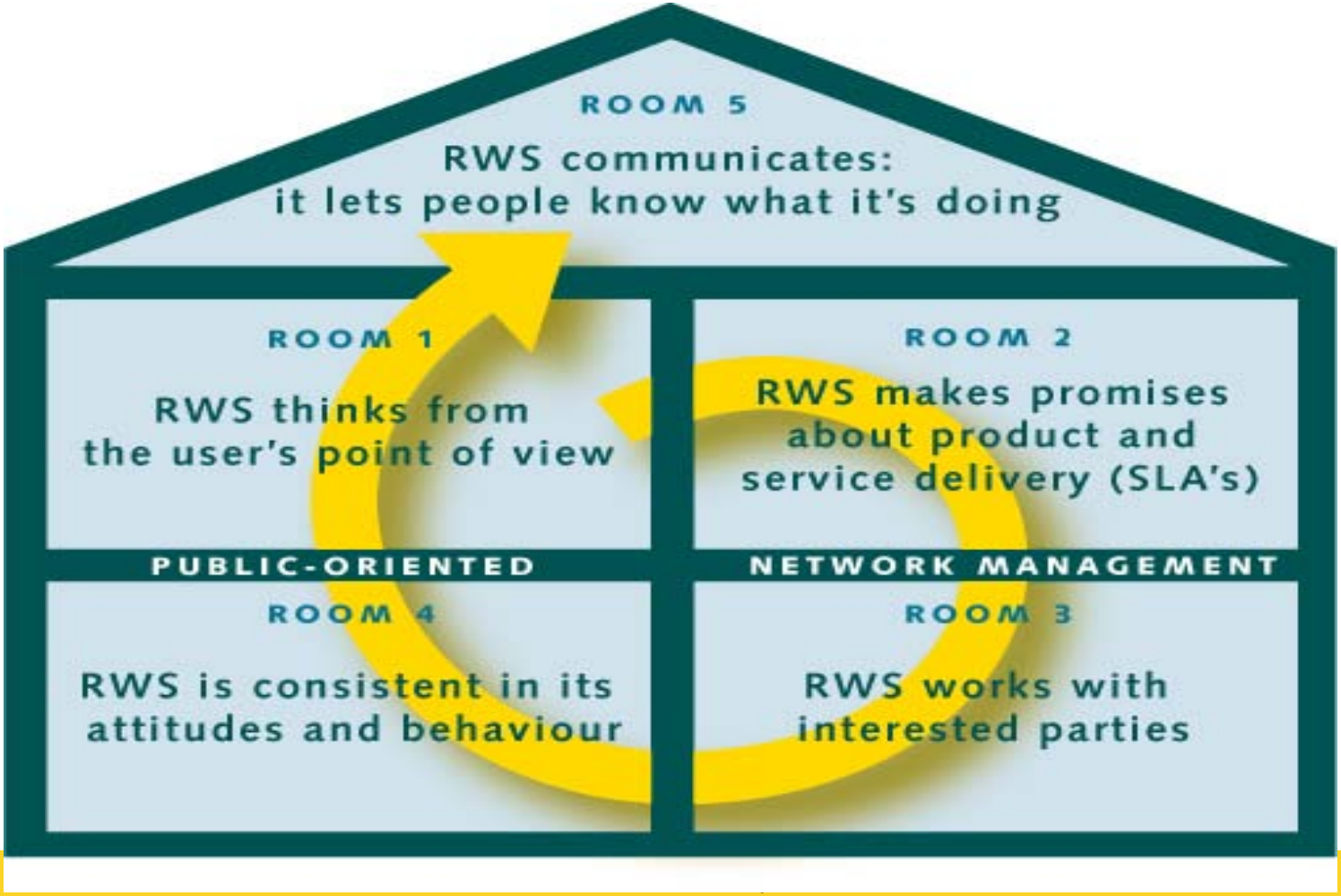
Priority Projects 2009-2012

- Extended Major Overhaul Program W2GO
- Urgent capacity expansion program (extra lanes): 30 projects, designated by special law
- 14 steel bridges in urgent need of major overhaul (improve strength)
- “MinderHinder”-approach should be standard in all projects
- ++ RWS ambitions for 2012:
  - User satisfaction score 7,5
  - RWS as exemplary principal

Share of congestion caused by road works 2002-2008



RWS's house of customer orientation: a public hall with five rooms



Goals of RWS

Reduce (structural) congestion and (temporary) nuisance

- With regard to safety and environmental conditions
- And as publicly oriented as possible (towards road users and other neighbouring interests)

Strategy for Mobility Management

1. Cooperative regional approach (aiming for joined problem-ownership and behavioral change employers and car-users)
2. Take own responsibility where the above is not effective enough (for instance targeting through traffic on the level of a corridor)

Fysical solutions

- Traffic Management
(hard shoulder, narrow lanes)

- Information (signs, leaflets, advertisements)

- Contracts
(bonus for faster work)

Verkeerschaos 'onoplosbaar'

Standard prevention for all works

- Workable hours
- Short period of time
- Traffic management

Organised attention

- Communication
- Solving problems with others
- Offering suitable alternatives

Soft Measures

- Mobility Management (demand management)
- Communication (ask and talk)
- From user perspective

(custom-made alternatives)

Results of (Free) Public Transport during Road Works

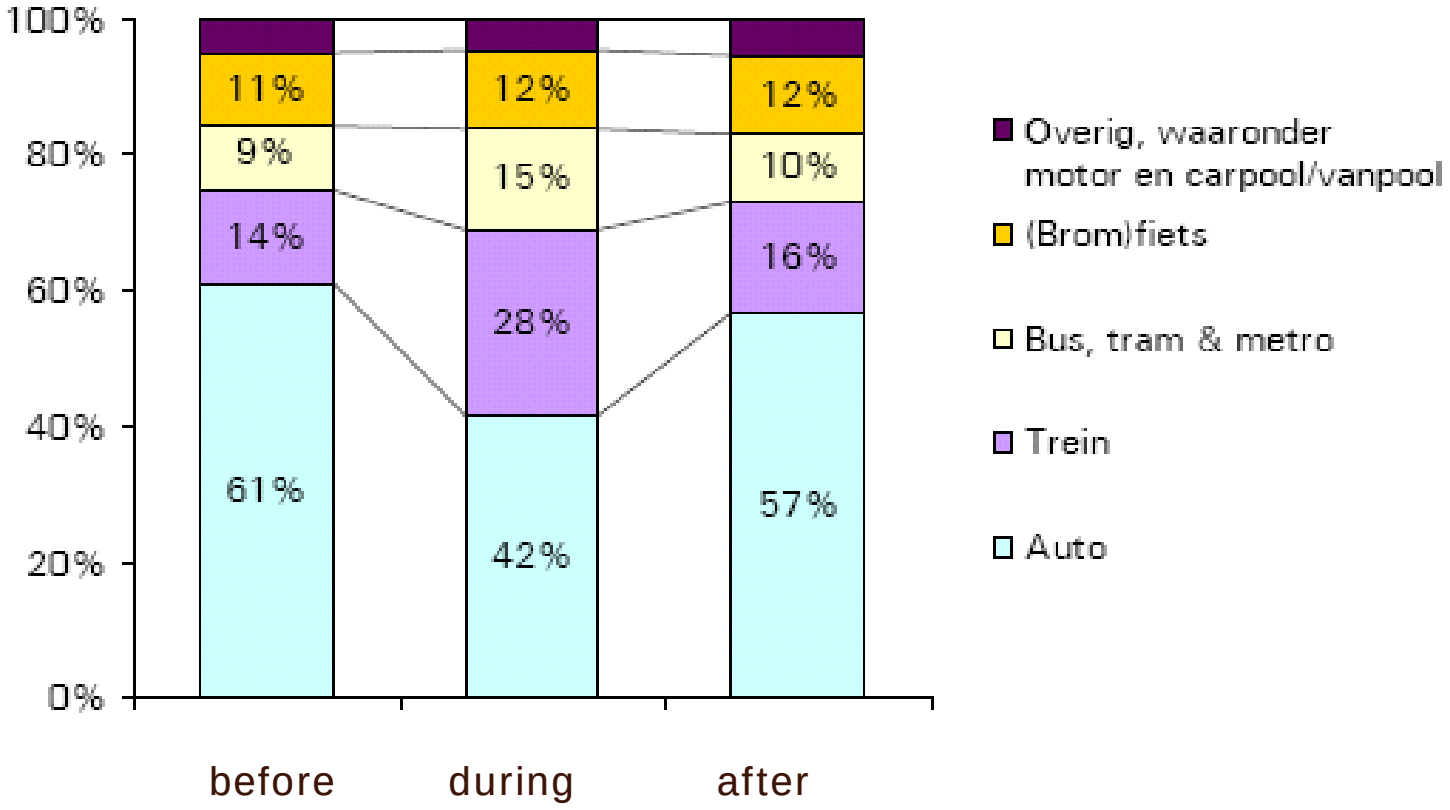
- 70.000 extra passengers in 3 weekends
- Of which 20% would have taken the car

- During 21 days around 400 people per day changed to public transport

… and much more….

Approach is succesfull: facts

Transport shift summer 2006 works near Amsterdam



‘Soft’ measures gain high results

- Better understanding by the road user
- High appreciation
- Positive coverage in media
- More attention to partnerships

A9 Gaasperdammerweg

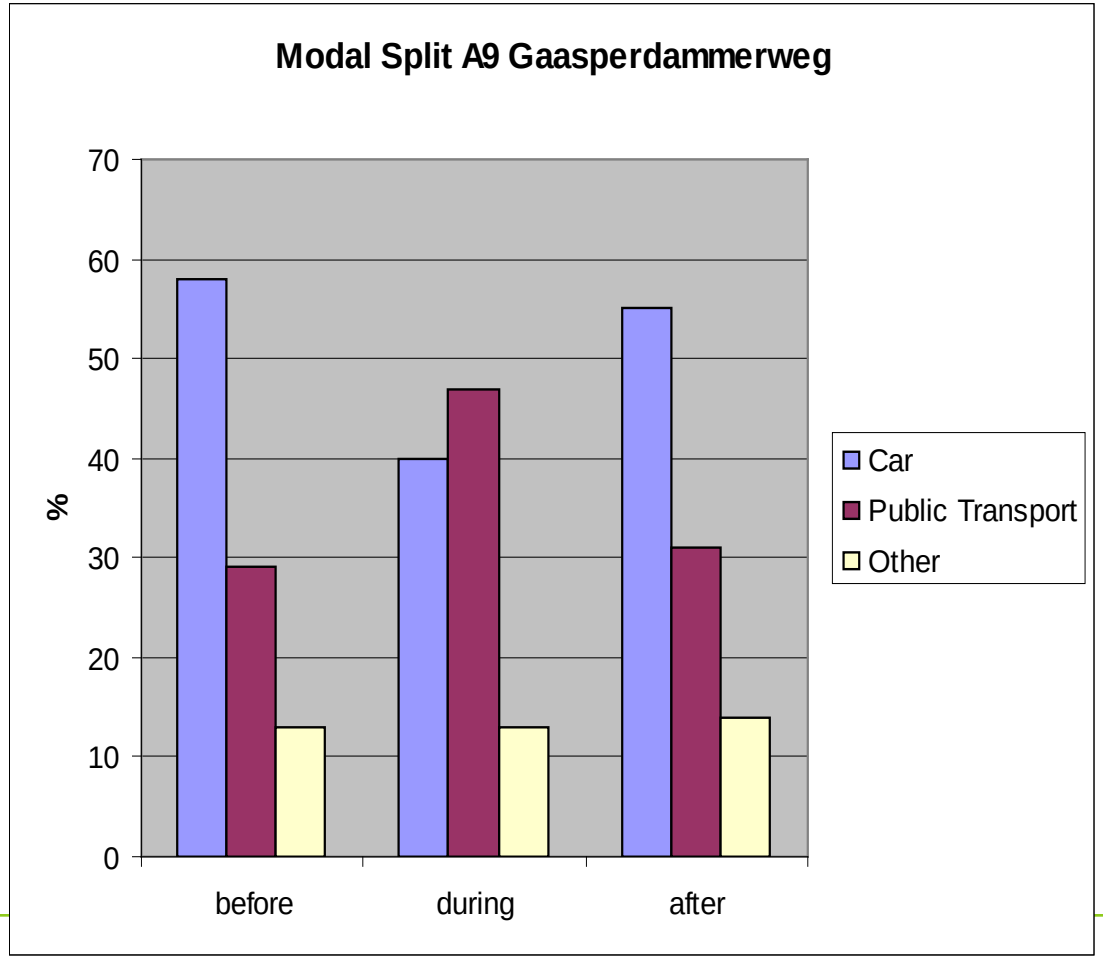
- Maintenance work in summer 2005
- Decreased capacity, ramps closed
- Mobility management
  - Public transport offered for free to workers in the area
  - Shuttle bus
  - Webcams
  - Vanpool
  - Travel advice

Tool: Mobility Manager for ‘awareness’

Result: 4500 changed car to PT during, 400 after road works; 4000 cars less on an average day (3000 Public Transport, 1000 route change)

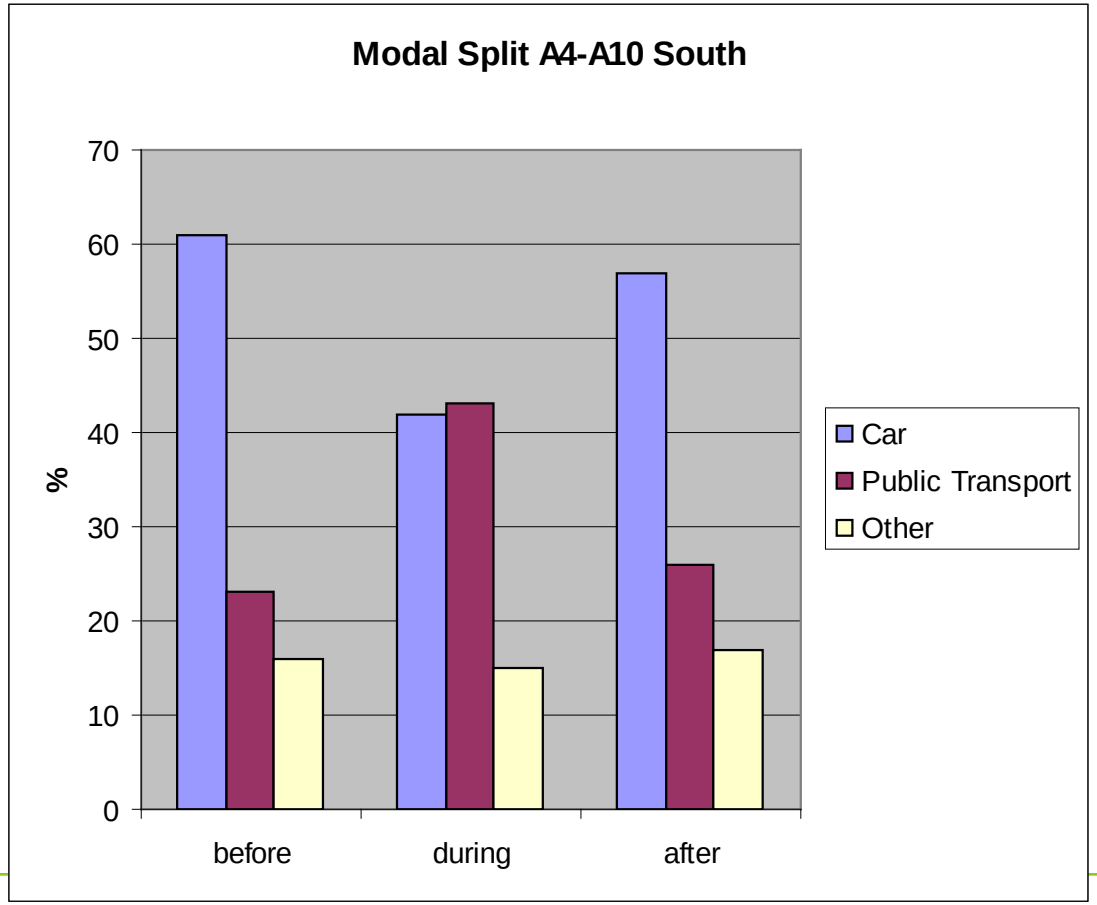
Costs ca 1 mln for RWS, 1 mln for companies.

Zuidoostpas (summer 2005)



- 17,000 passes issued
- 52% (8,000) used the pass, of which
- 88% (7,000) on average 2.7 days a week

A4-A10 Zuidpas (summer 2006)



- 30,000 passes issued
- 54% (16,000) used the pass, of which
- 85% (14,000) once or more than once a week
- 5% reduction in traffic (of a maximum of 15%)
- Total costs ca 2.4 mln

A2 2006 - 2012

Totaal

- **25 projects**
- **> 3.000 M€**
- **New and maintenance**
- **Roads and bridges**
- **Widening Amsterdam – Maastricht with 1 or 2 lanes**

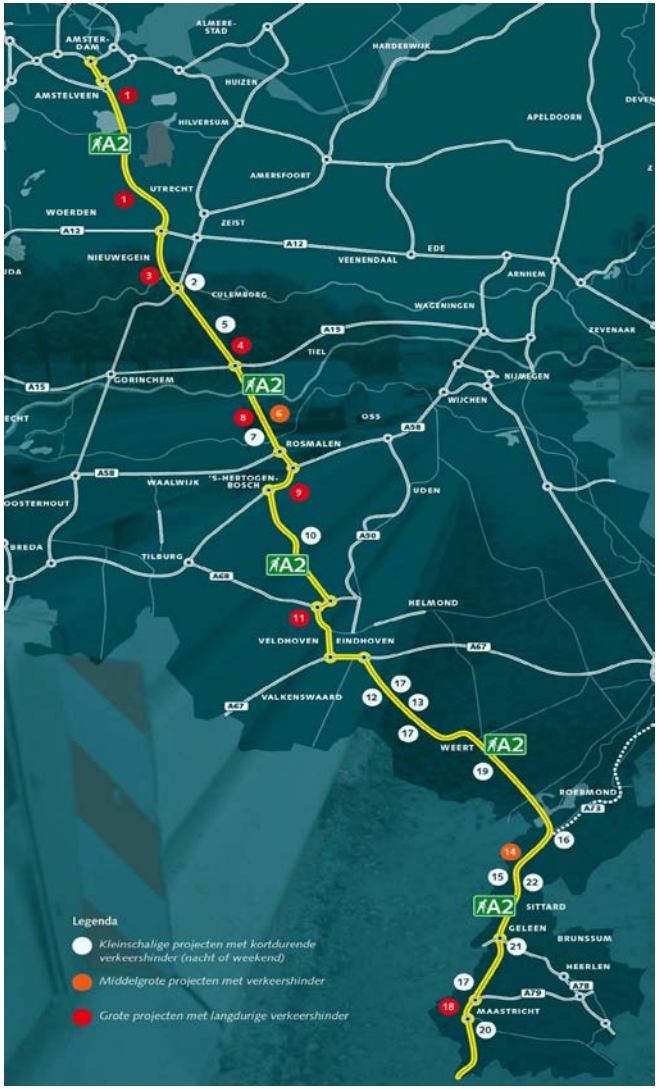
Largest projects 2007-2010

- **Amsterdam – Utrecht**
- **Everdingen – Deil**
- **'s-Hertogenbosch**
- **Eindhoven**

MM

- **Extra IC station**
- **Door to door transport**
- **Employer's program**

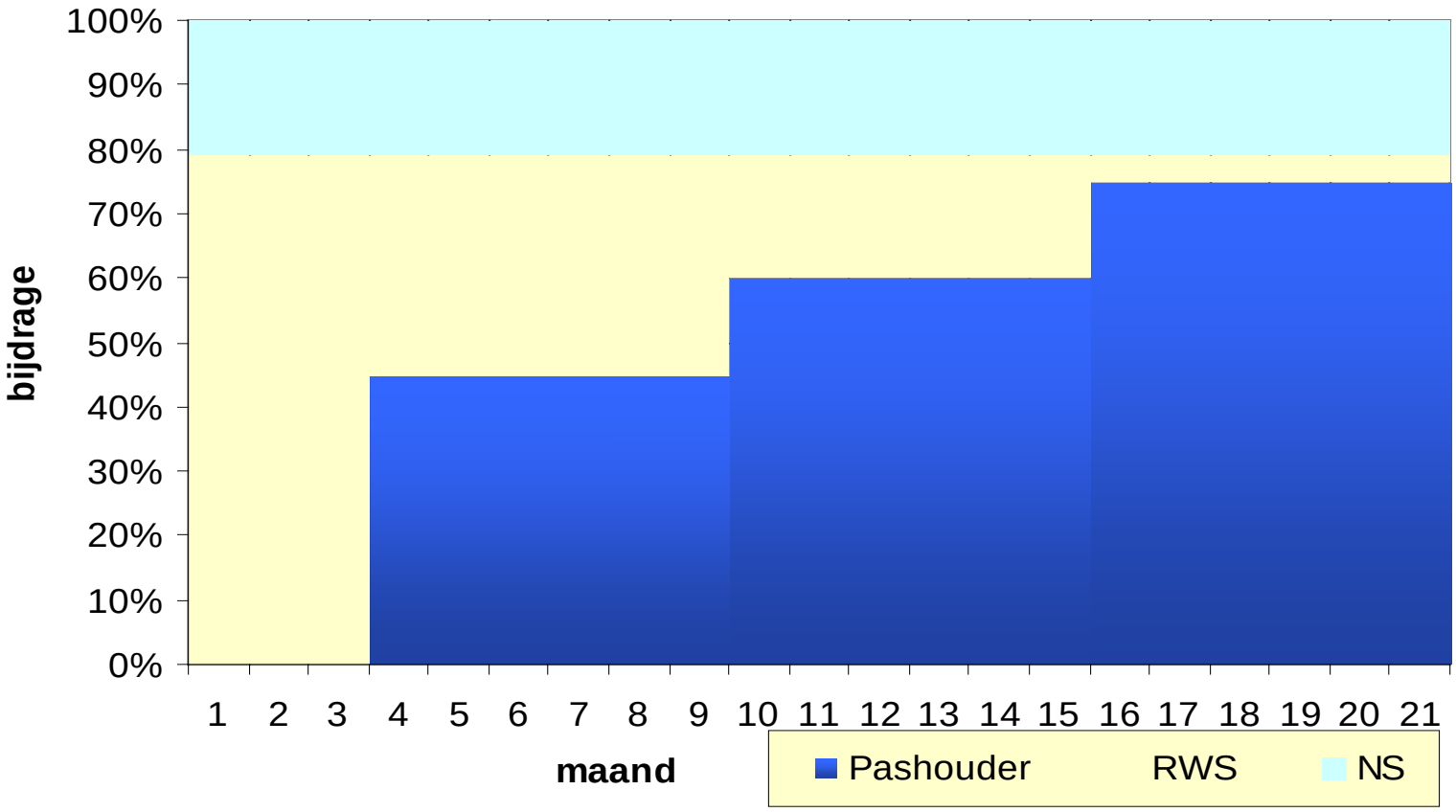
Despite measures: congestion



A2 MinderHinder - pas

- 3 months free transport door to door by public transport
- Also based on ANPR, special group, but more result from roadside information
- Pilot group of 500 road users, 70 tried the offer
- New group of 3000 since September 2008; sold out at over 1200 applicants
- After free trial, 3 x 6 months discount on standard monthly ticket
- Ends 2010

Financieel ingroeimodel



Results A2 Minder Hinder Passen

Till january 2010:

- Total applicants ca 2570 since 2008
- Ca 1000 commuters using the free 3 month pass ca 1000
- Ca 400 commuters using the discounted pass (50% conversion)

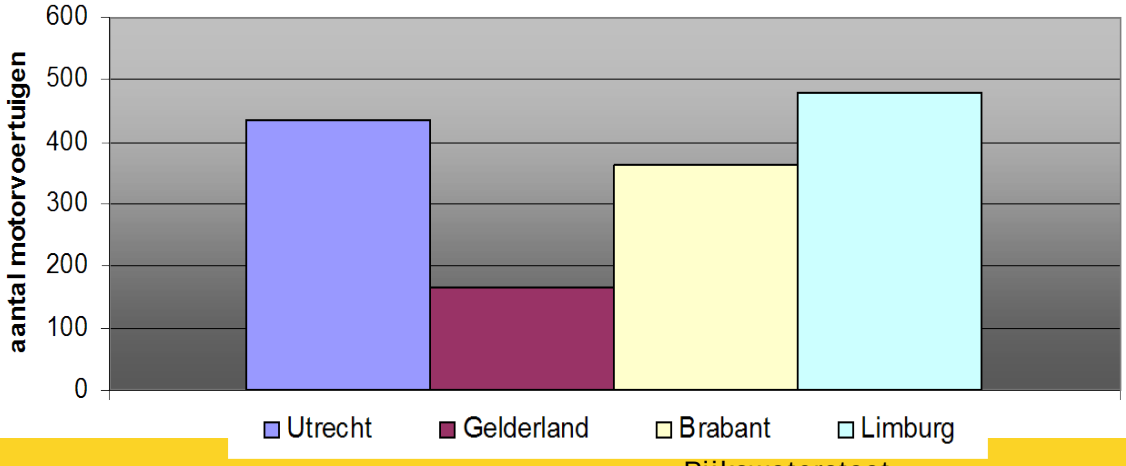
- Pass is used 4 days a week on average
- Average distance traveled is 44 km one way
- More than 430 trip a month by public transport bike (OV-Fiets)

Results on the road

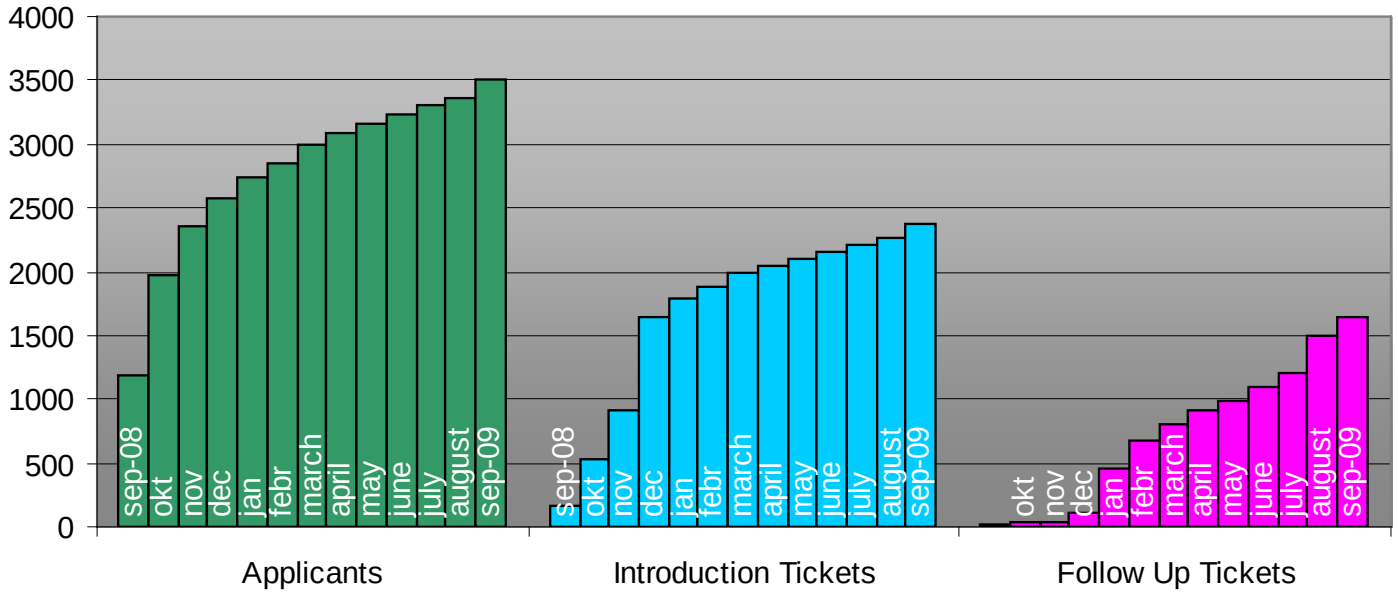
- 1100 passes in january 2010…
- Means a reduction in length of the daily traffic jam of 5.5 km

Per region:

- Utrecht, traject Utrecht- A'dam: 435 less vehicles
- Gelderland, traject Zaltbommel - Utrecht: 160
- Brabant, traject 's-Hertogenbosch - Nederweert: 360
- Limburg, traject Weert- Maastricht Randwijck: ca 480



Results application, Proefpas & Follow up



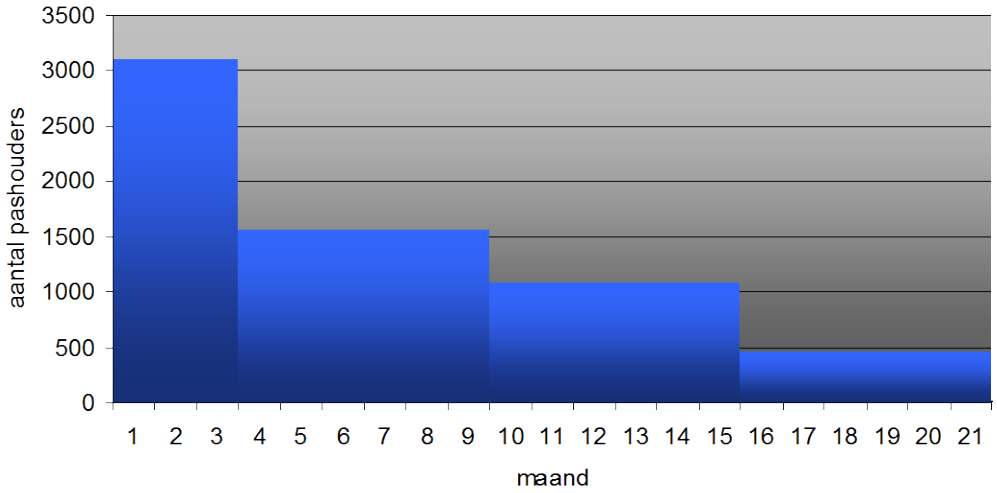
t/m Sept 2009

Applications	3500
Proefpas	2370
Follow up	54% conversie (Proefpas to first follow up)
Usage	3,7 dg/week, 45 km traject by train

Costs

Expectation 2008 tot begin 2010

- 3100 Proefpassen (100%)
- 1550 Vervolgpas –1-: 50%
- 1085 Vervolgpas -2-: 30%
- 465 Vervolgpas -3-: 15%



- Budget A2 Minder Hinder passen: 2,2 mln total
- Costs RWS per pas monthly daily
- - PP (3mnd): 120 € 6,7 €
  - VP 35 € 2,0 €

- Costs RWS per users per day
  - PP+ 1VP (9 mnd): 3,5 €
  - PP+ 2VP's (15 mnd): 2,2 €

Results Perception A2 Minder Hinder Pas

- Satisfaction: 8,6 out of 10 for offer of Rijkswaterstaat

- Reasons to change behaviour
  - Try public transport 53%
  - Avoid traffic jams 46%
  - Financial 43%
  - Efficiency (time) 25%
  - Environmental reasons 17%

- Would you have taken PT without the offer? (dus zonder RWS aanbod)
  - No 51%
  - Probably 37%
  - Maybe yes 12%

Reasons to apply?

Wat waren voor u de belangrijkste redenen om in te gaan op het aanbod van de A2 Minder Hinder Proefpas?		
File vermijden	392	44,7 %
Files langer/heviger geworden op woon-werktraject	410	46,8 %
Kortere reistijd met OV	75	8,6 %
Reis is comfortabeler met OV	52	5,9 %
OV uitproberen (vergelijking OV/auto)	463	52,8 %
In trein kan ik werken, lezen, etc.	231	26,3 %
Financieel voordeel	380	43,3 %
Stijgende brandstofprijzen	93	10,6 %
Milieu	144	16,4 %
Anders, namelijk:	14	1,6 %
Geen keuze	0	0,0 %

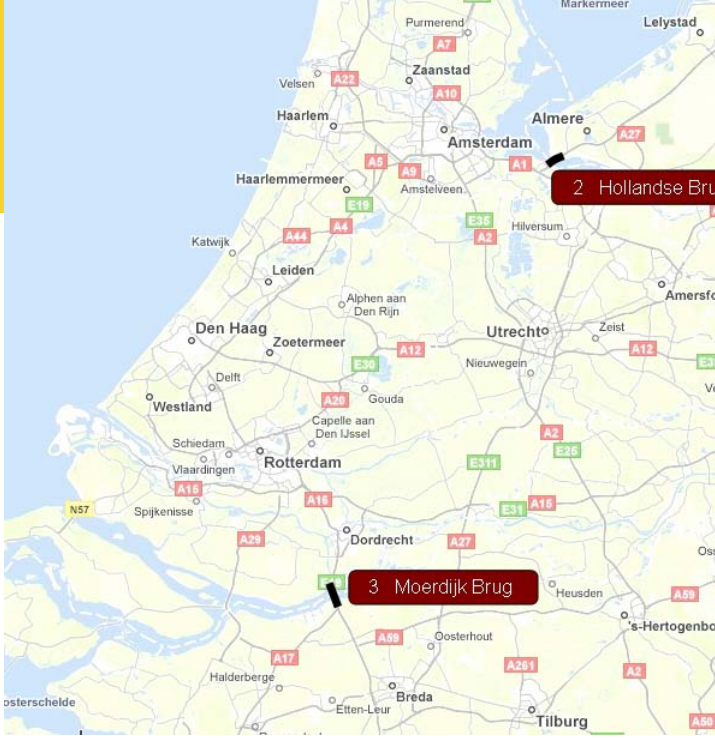
Appraisal for the initiative

Kunt u met een rapportcijfer op een schaal van 1 t/m 10 uw algemene waardering aangeven voor het initiatief van Rijkswaterstaat tot het aanbieden van de A2 Minder Hinder Pas aan autoforensen?		
1	29	3,3 %
2	0	0,0 %
3	0	0,0 %
4	0	0,0 %
5	1	0,1 %
6	4	0,5 %
7	45	5,1 %
8	277	31,6 %
9	265	30,2 %
10	256	29,2 %
	0	0,0 %
Geen keuze	0	0,0 %
Totaal	**877**	**100,0 %**

Avoiding peak hours and congestion / Spitsmijden – incentives to change to driving off-peak

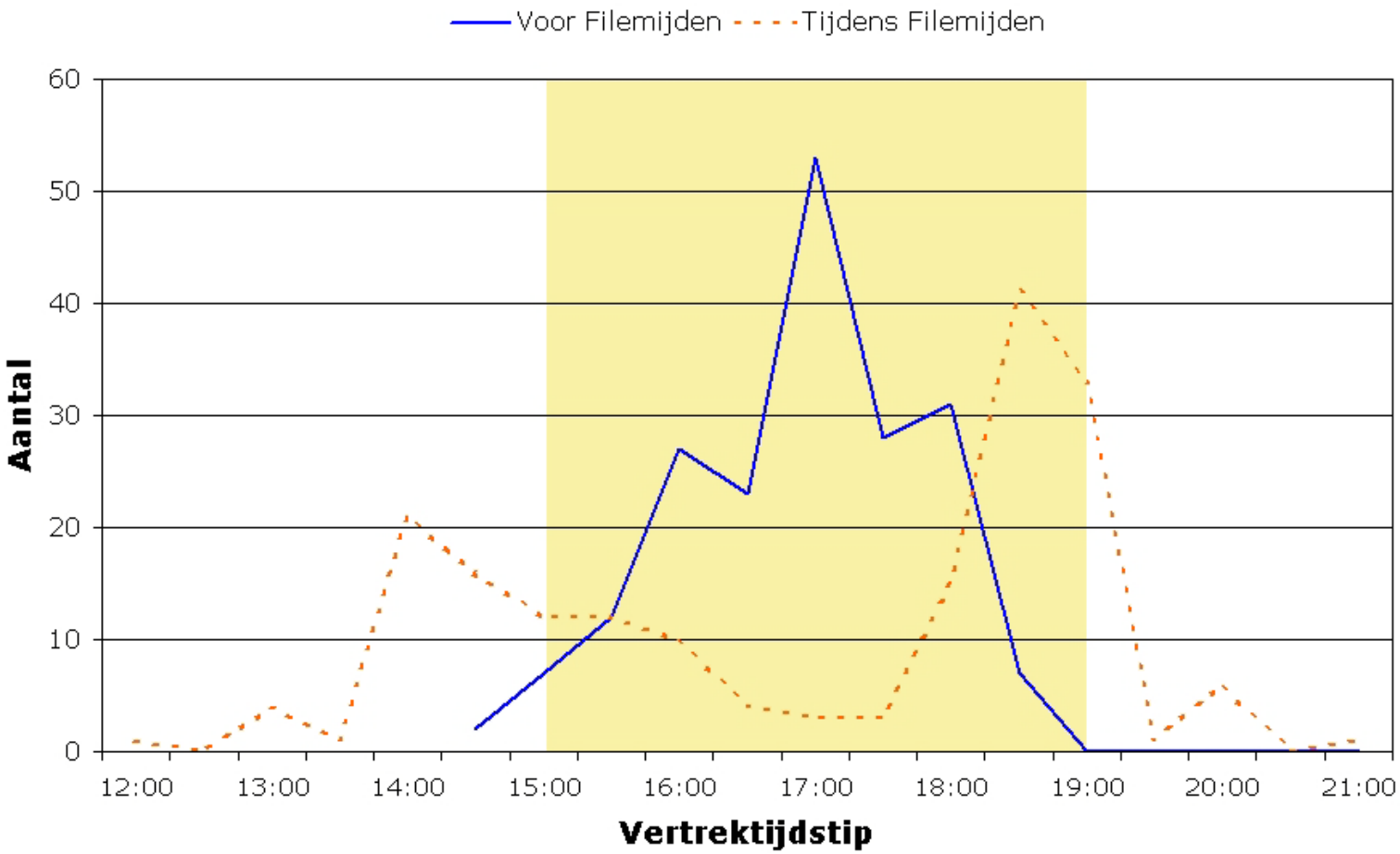
- Started with pilot on A12 near The Hague
  (part of innovation programme)
- Participants get rewarded (money or “in natura”) for not travelling by car during rush hours
- Substantial change (50% shift) in travel behaviour among participants (travel later, e-work, use PT)
- Success is reason for broader implementation, additional to MM packages:
  - A6 Hollandse Brug, A16 Moerdijkbrug
  - 3 other locations under consideration/development
  - Also for trains!

Highway A16 Moerdijkbridge

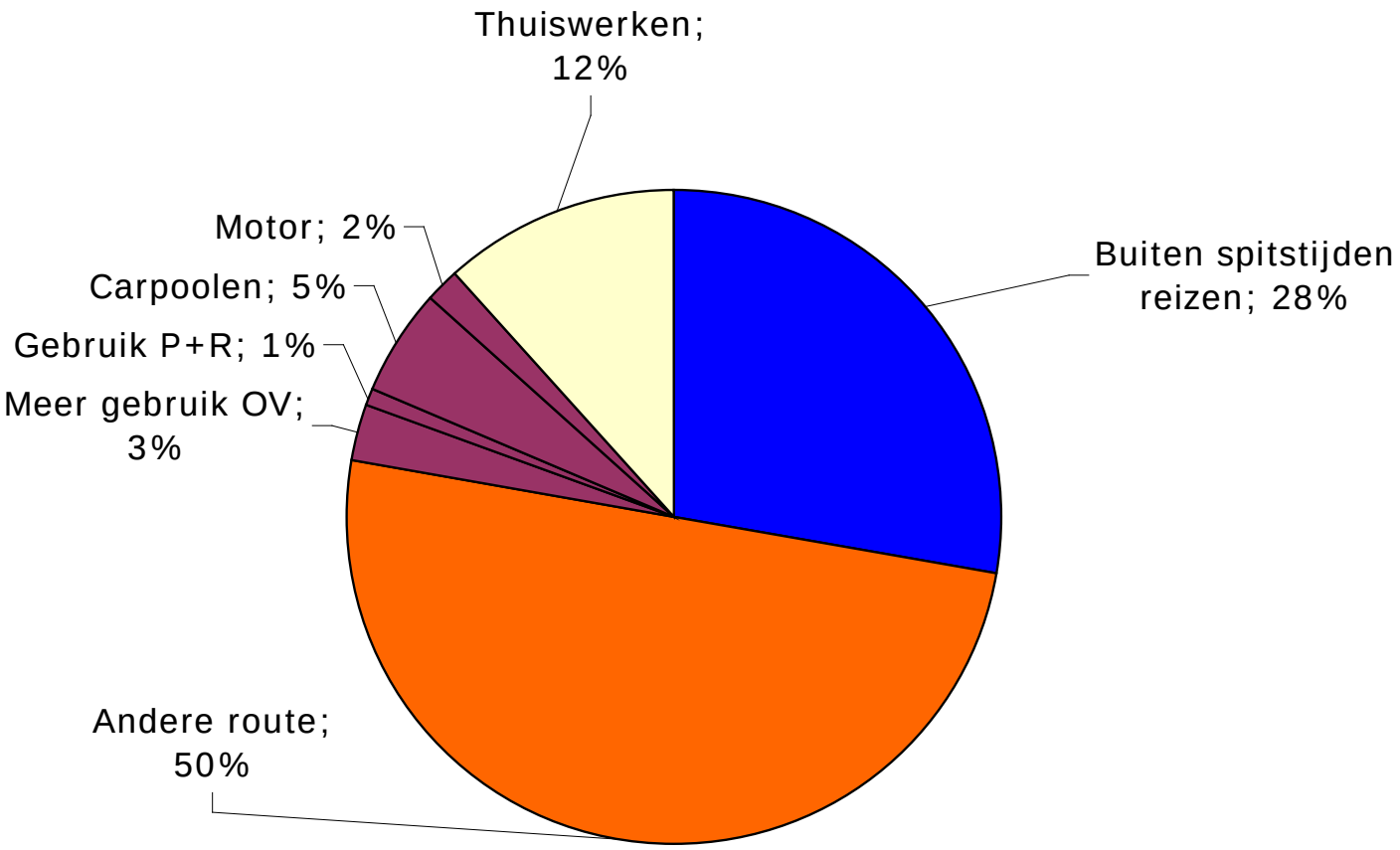


- North-South 36.000 vehicles in 24hr; 15.000 15.00 – 19.00
- 25% trucks
- Typical RWS project, no other actors or initiatives
- Filemijden (incentive to avoid peak hours) – You get 4 euro when you avoid driving on the A16 between 15.00 and 19.00 relative to your usual behaviour
- 2700 applicants, including 350 company car drivers

Vertrektijdstippen vanaf werk naar Moerdijkbrug



Verdeling gedragsalternatieven 'FileMijden A16'



Results

- Bonus for contractor meant, that works finished 3 weeks early
- Content road users, including truck drivers
- Ca 700-800 avoided the afternoon traffic jam
- Good cooperation between RWS and municipalities and companies

- Afterwards: most people changed back their behaviour

Results

- Total costs of the project € 24 mln
- € 2 mln for traffic management, mobility management and communication
  - € 840.000 Filemijden
  - € 745.000 Road side information
  - € 360.000 Park and Ride parking

- € 2,4 mln in benefits; based on:
  - VoT pax € 9,82 / Cost 0,084 per vehicle km
  - VoT freight € 43,27 / Cost 0,256 per vehicle km

  - € 1.365.000 Filemijden
  - € 947.000 Road side information
  - € 56.000 Park and Ride parking

Costs and benefits?

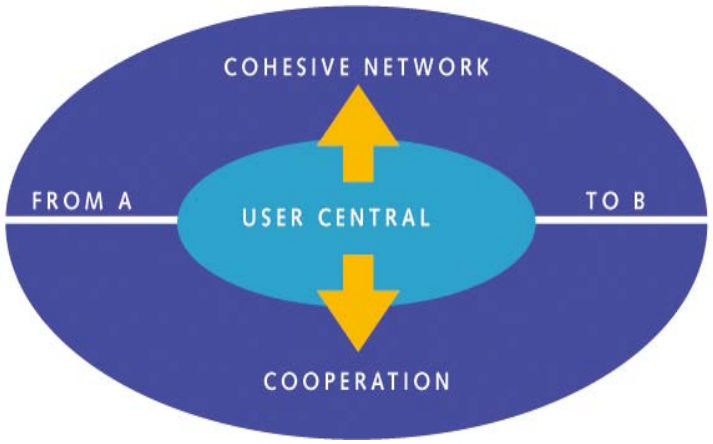
"The more we know, the more we like to understand"
, but the less we do…

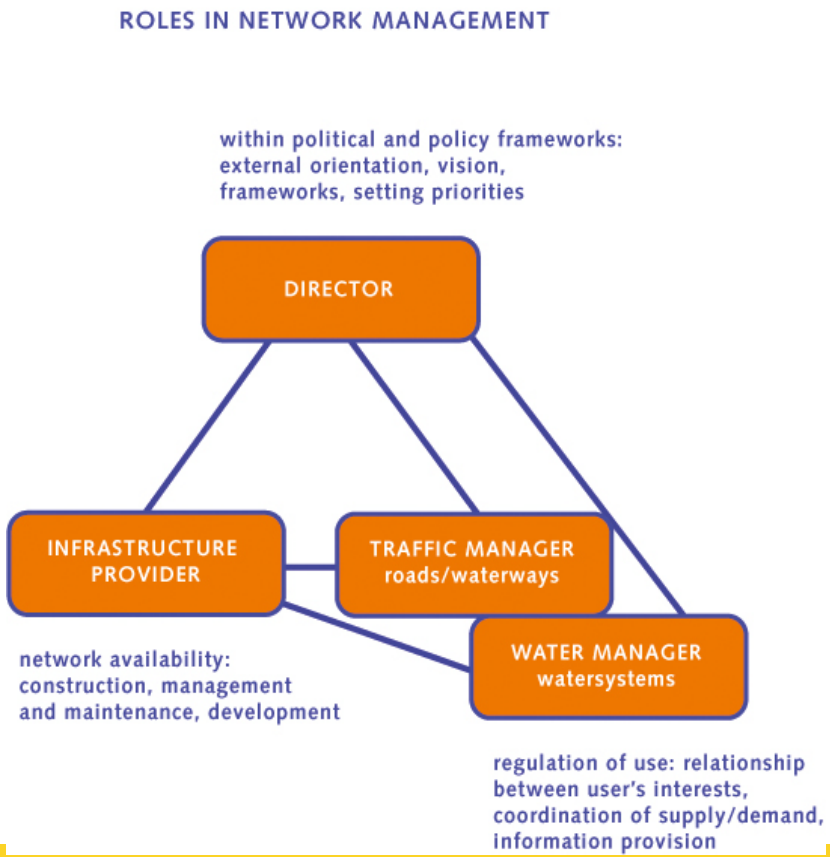
- How do we calculate benefits?
  - Value of Time
  - Public Appraisal
  - Regional cooperation
  - Invisible Cost Savings

- And what does it mean
  - Is an 9/10 better than a 7/10?
  - Is one complaint on Twitter as bad as it is?
  - What's the worth of free publicity?

- As a public actor, are you looking for the best user satisfaction *and* best quality for the least amount of money?

Driver: RWS's ambition to change: from network administrator to public oriented network manager (for roads, waterways, watermanagement systems)





Roles Rijkswaterstaat

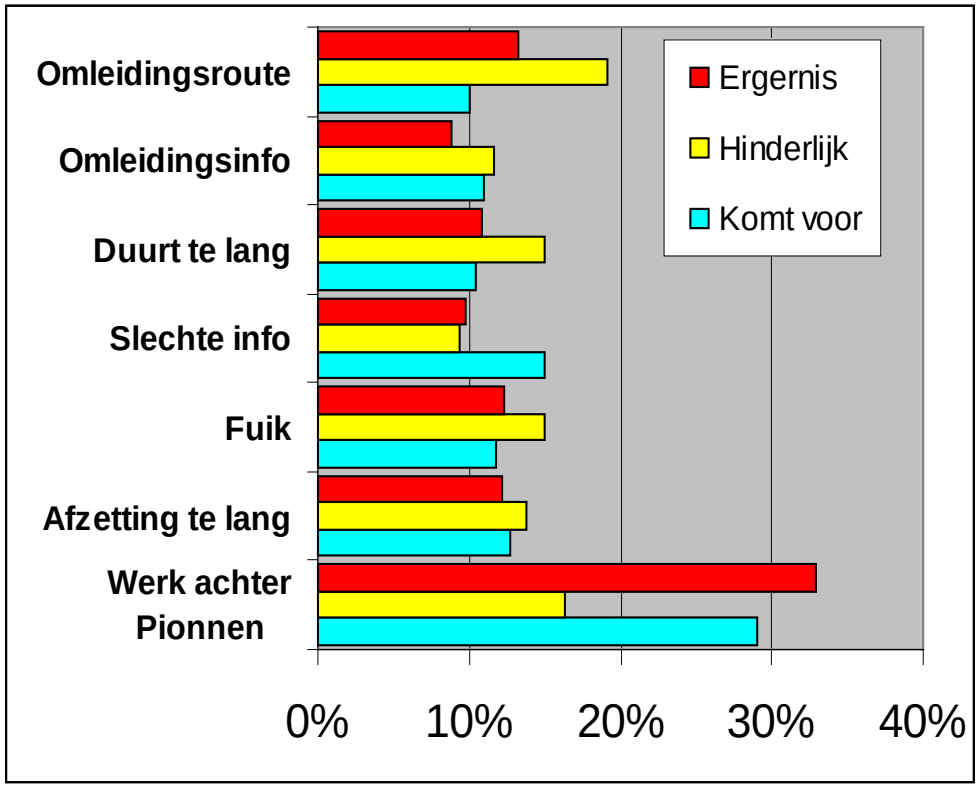
- **ROAD MANAGEMENT**
  (maintenance, capacity-planning and new lay-out)

- **TRAFFIC MANAGEMENT**
  (information, route strategies, quick response actions)

- **PARTNER IN MOBILITY**
  (pro-active, choice of alternatives, cooperative)

- **EMPLOYER**
  (employment conditions, social and environmental responsibility)

How does the road user appreciate it?



-Deviation route

-Deviation info

-Duration too long

-Inadequate info

-Getting trapped

-Closed lane length too long

-Work behind barriers/cones

What does the road user want:

- feeling “in control”
- self-evident, “obvious” guidance

Uniform classification of “nuisance”

class	degree of disruption	delay due to detour or congestion	example
0	None		No change in speed limit. Shifted lanes. Work on shoulders.
1	Minor	hardly	Limited speed (70 or 90 kph) Shifted lanes
2	Limited	< 10 minutes	Ramp / exit closed
3	Major	10 – 30 minutes	Closure in weekend, A16 Brienenoord bridge
4	Fierce	> 30 minutes	A29 Heinenoord tunnel Very exceptional

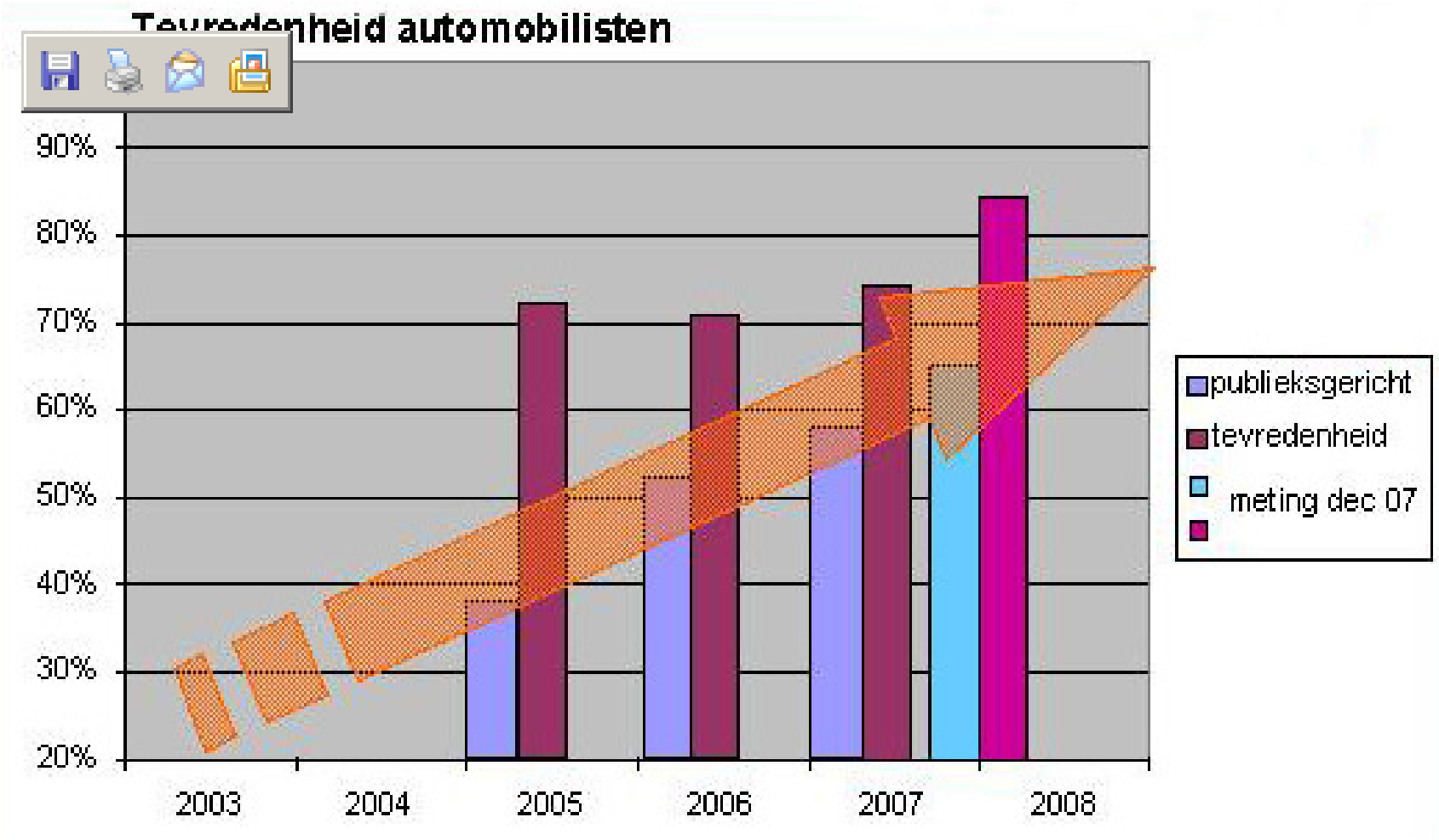
- For Class 3 or 4 projects, MM *should be considered* as a means of reducing traffic volumes during the works.
- For class 2 and 3 projects MM *could well be used* in order to offer the road users an alternative to the congested road, thereby maintaining a user-friendly ‘image’.

Uniform categories:
for each category a package of measures

affected road users		<1000	< 10K	< 100K	< 1M	> 1M
class	delay					
1	none	E	E	D	C	B
2	< 10'.	D	D	C	C	B
3	10'-30'	C	C	B	A	A
4	> 30'	C	B	B	A	A

class	D/E	C	B	A
minimal advance notice term	10 days	6 weeks	3 months	6 months

Development of user satisfaction 2005 - 2008



Final remarks on mobility management

- Mobility Management or Travel Demand Management needs tailor made processes; much can be learned from best practices, but success can not be copied. So costs can say something about a project in one region, but nothing about another

- MM should give more choices, more freedom of choice and a better solution for the individual traveller. These are hard to measure benefits.

- MM can serve as a way to encourage other actors to think about congestion

- MM comes as a part of a package to fight congestion! Together with communication and traffic management, but also contract management and regional cooperation. Take into account the total costs of these and then think about benefits?!

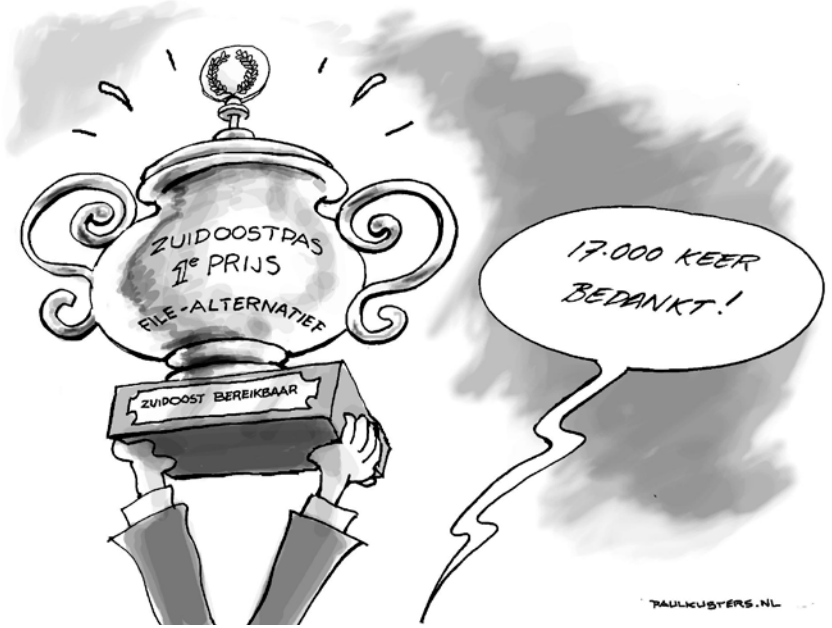
Discussion / Questions

met daarop dezelfde tekst. | de.weetjes.com. | meerlagig.

Gratis reisje met de trein

• Deze meiden moeten dan wel staan in de trein, maar dat maakt de pret er niet minder om. Hun reisje was in ieder geval gratis. Omdat de A58 bij Markiezaat en Zoomland in de richting Roosendaal dit weekend was afgesloten wegens werkzaamheden, gaf Rijkswaterstaat treinkaartjes weg op het traject tussen Roosendaal en Vlissingen. Als deze proef slaagt, wordt bekeken om voortaan bij alle wegwerkzaamheden automobilisten gratis met de trein te laten reizen.

FOTO: JAAP WOLTERBEEK



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