

Data driven
monitoring of
logistic flow

City dashboard Rotterdam

Rotterdam



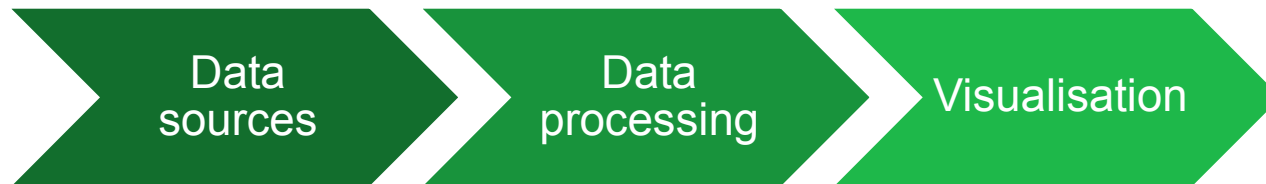
- **Ambition:** Accelerate innovations in metropolises to achieve social, economical and sustainable objectives



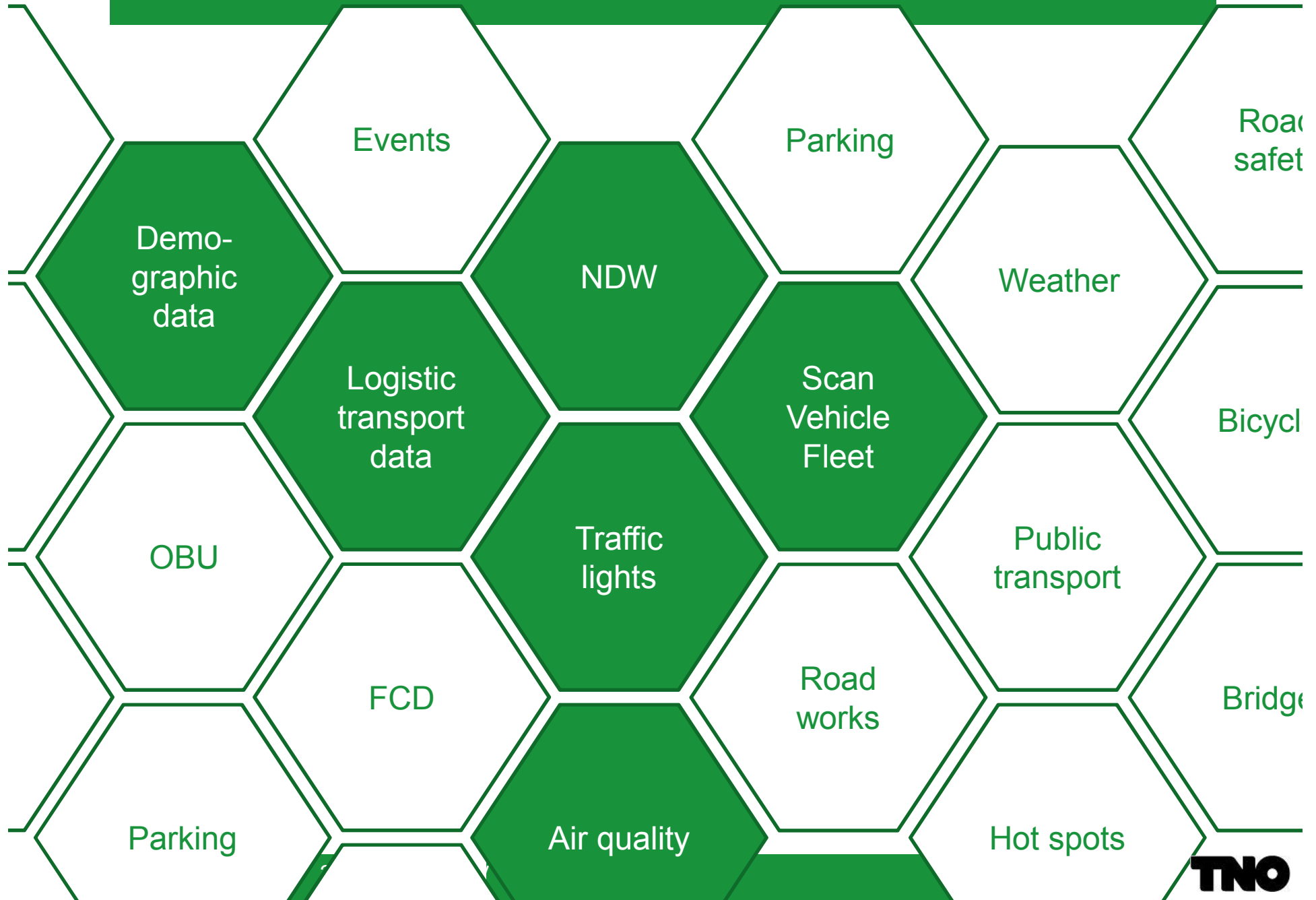
City Dashboard Rotterdam

☐ (real-time) knowledge of status of:

- ☐ Traffic
- ☐ Logistic flows & flows of goods
- ☐ Impact air quality
- ☐ More



Data Sources



Data processing

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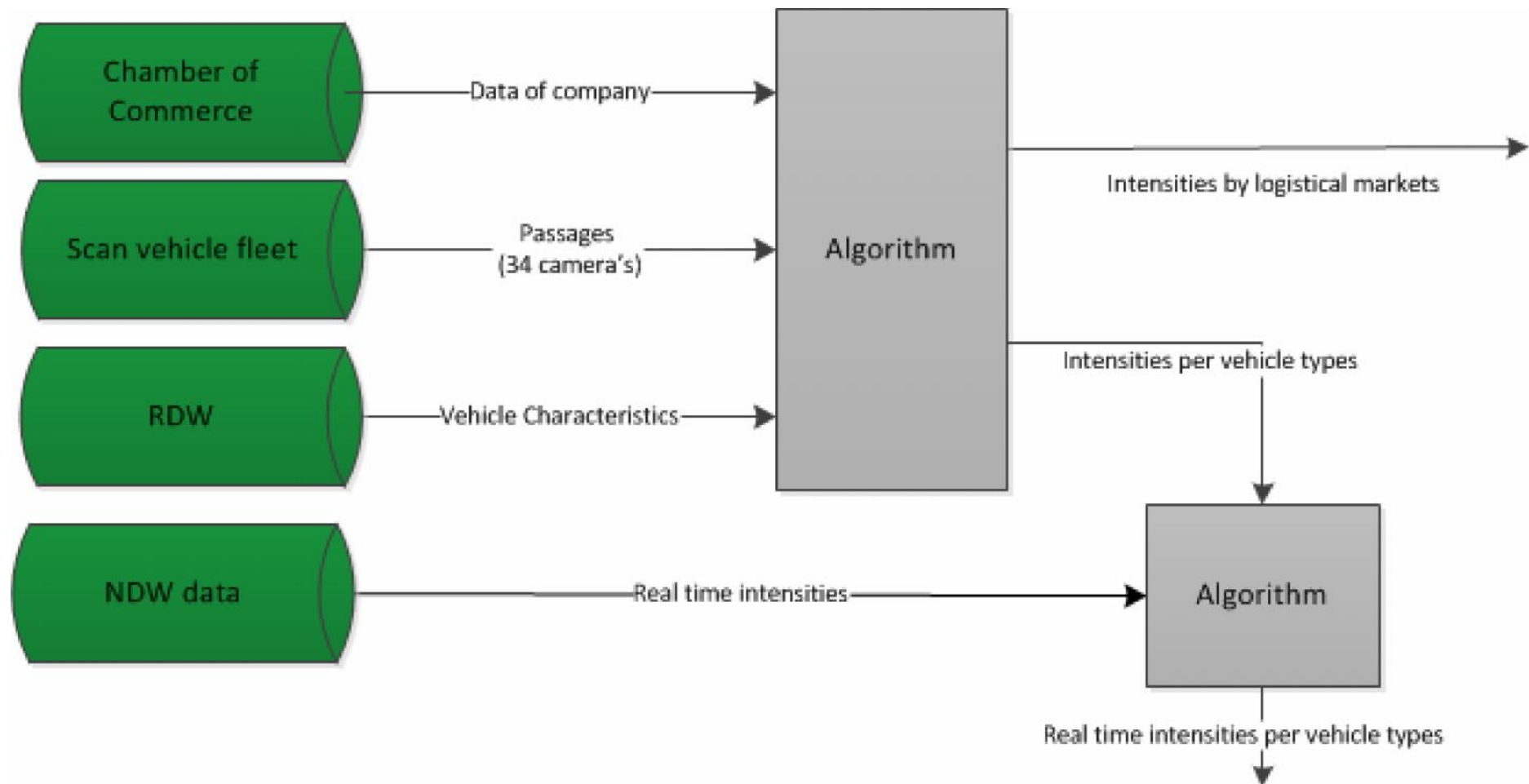
%% Read overlaid file RWS
[~,~,data]=xlsread('wateroverlast loggings totaal - categorized v2.xlsx','Export');
wegNaam=data(3:end,5);
wegZijde=data(3:end,6);
wegDvkLt=data(3:end,10);
hmStart=data(3:end,7);
hmEnd=data(3:end,8);
[descriptionU,~,description]=unique(data(3:end,14));

%% Get wegdata structuur
wegdata_new=load('E:\users\Taoufik\Projects\PPA\Traffic_Histoy\2014\wegdata_new_140202.mat'); % Willekeurige wegdata laden.
velden=fieldnames(wegdata_new);
wegdata_new=wegdata_new.(velden{1});

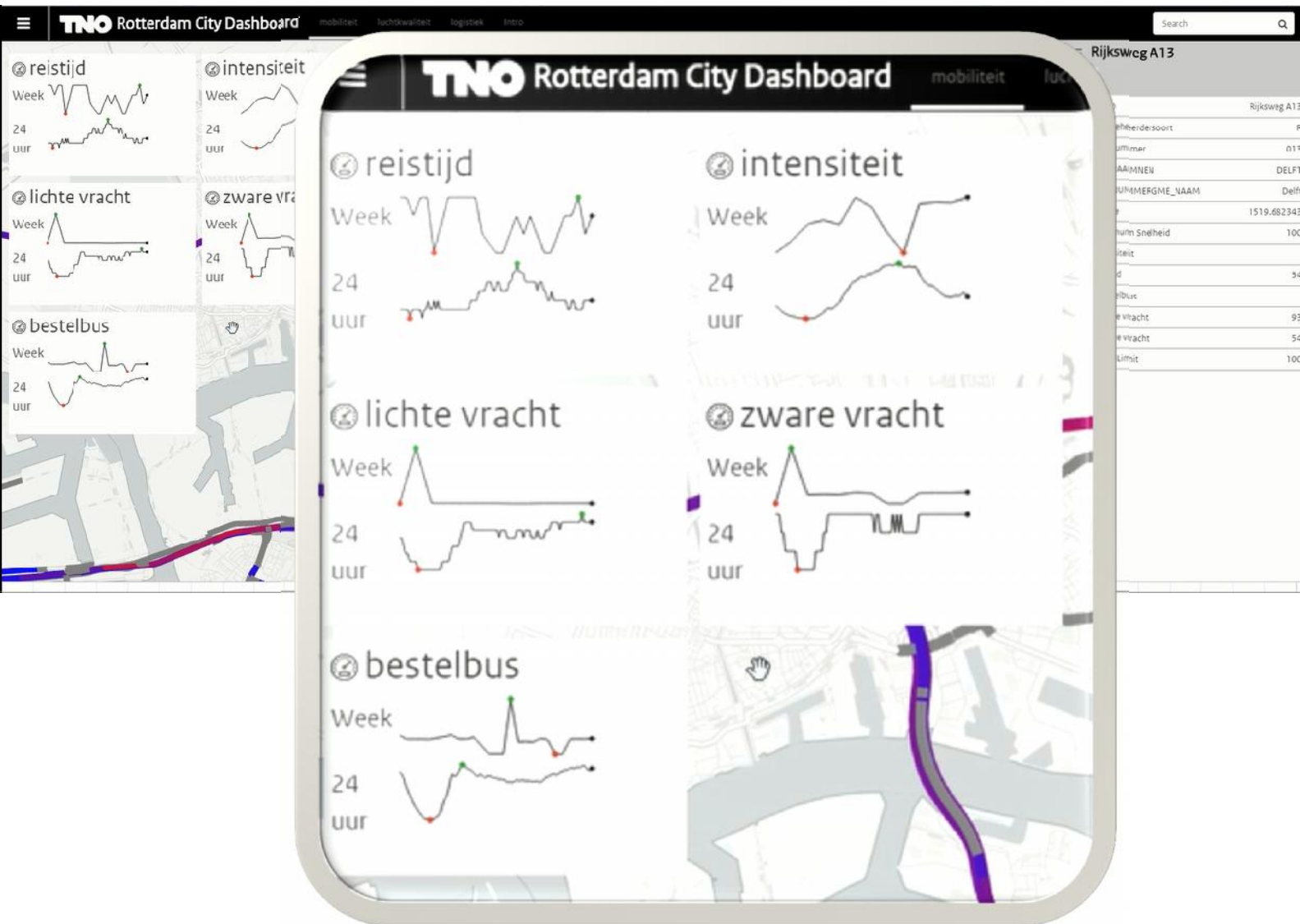
%% Construct wegcodes that match wegdata codes
idxA=strncmpi(wegNaam,'a',1); % Index voor A-wegen
wegNaam=wegNaam(idxA); % Restrict data to A-wegen
wegNr=str2double(strrep(wegNaam,'A',''));
wegZijde=wegZijde(idxA);
wegDvkLt=wegDvkLt(idxA);
hmStart=str2double(hmStart(idxA));
hmEnd=str2double(hmEnd(idxA));
hmEnd(isnan(hmEnd))=hmStart(isnan(hmEnd));
description=description(idxA);
idxDvk=~cellfun(@isempty,wegDvkLt); % Plekken waar ik dvk letter heb
wegDvk=double(char(wegDvkLt))-double('a');
wegDvk(wegDvk==65)=26;
idxOnbekend=strncmpi(wegZijde,'onbekend'); % Richting
idxL=strncmpi(wegZijde,'li');
idxR=strncmpi(wegZijde,'re');
idxBeide=strncmpi(wegZijde,'beide');
wegRichting=zeros(numel(wegZijde),1)+3; % Codeer dusdanig dat Li=1,Re=3, Beide=4 en Onbekend=2
wegRichting(idxOnbekend)=2;
wegRichting(idxL)=1;
wegRichting(idxR)=3;
idxRechts=hmStart>hmEnd & idxBeide;
idxNull=hmStart>hmEnd & idxOnbekend;
wegRichting(idxRechts)=1;
wegRichting(idxNull)=1;
wegRichting(idxDvk)=0;
wegcodesStart=wegNr/10^3+wegRichting/10^4+wegDvk/10^6+hmStart/10^9;
wegcodesEnd=wegNr/10^3+wegRichting/10^4+wegDvk/10^6+hmEnd/10^9;
wegcodesStart(idxDvk)=wegcodesStart(idxDvk);

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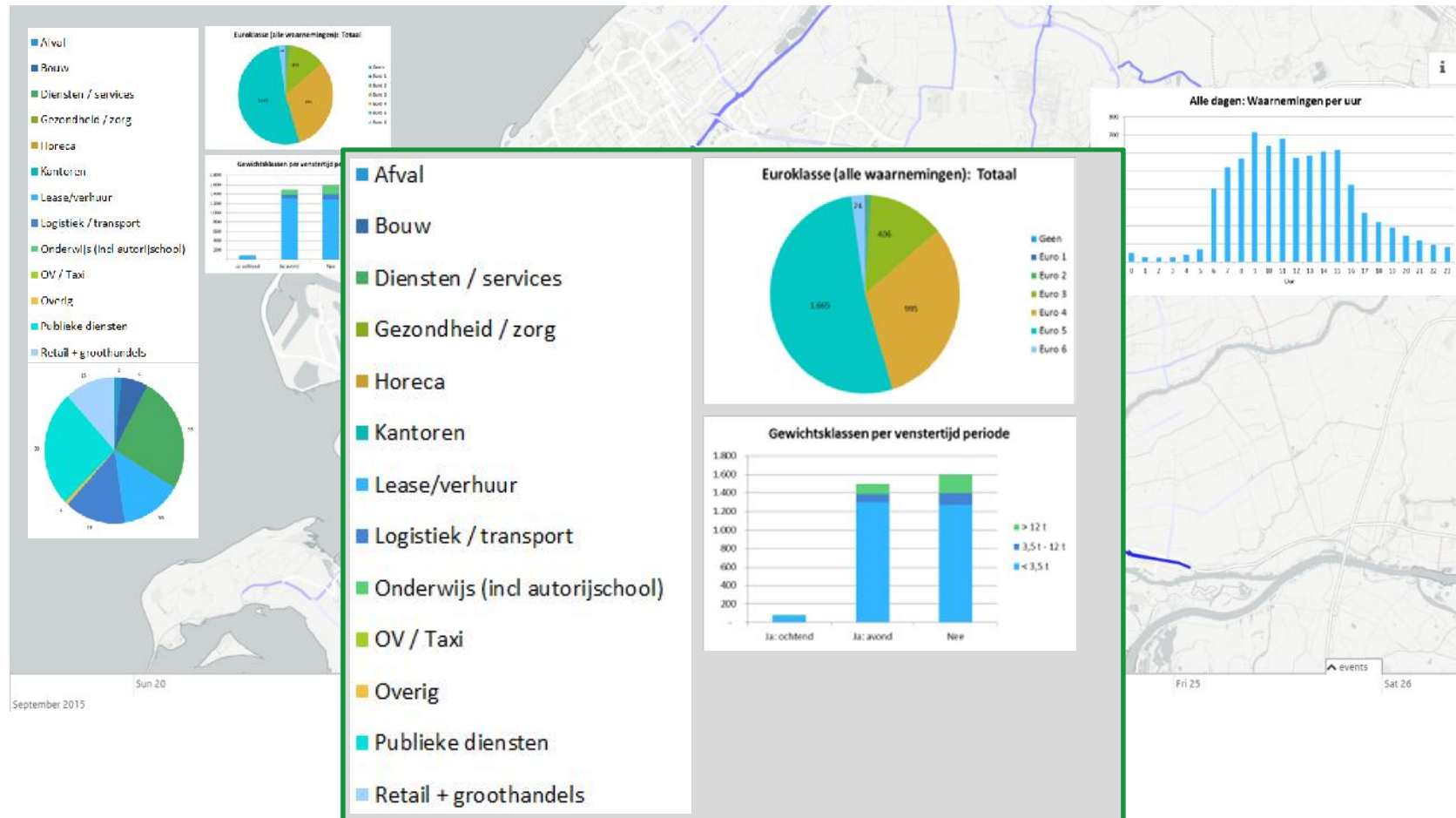
Data processing – Logistic flows



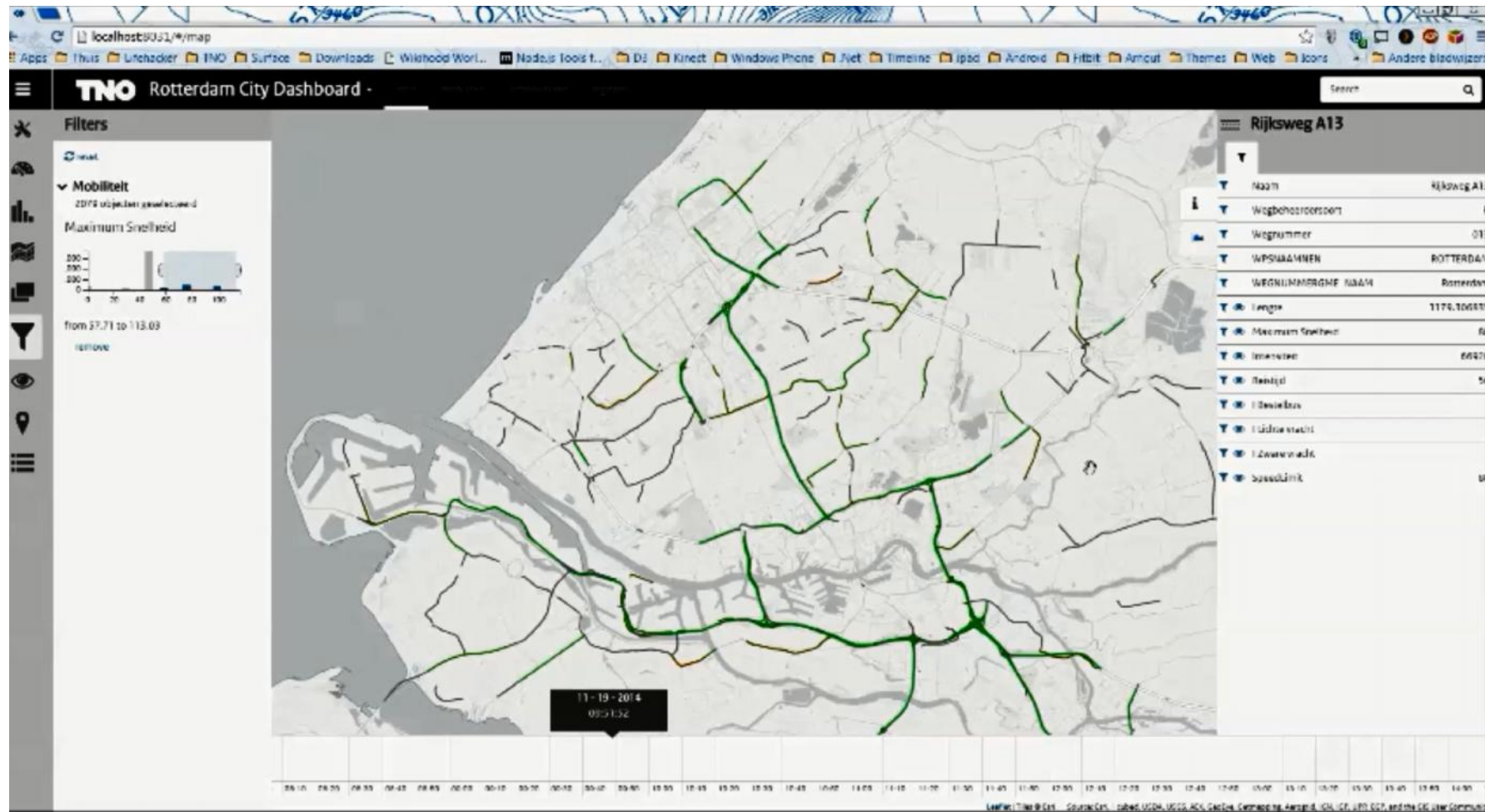
Visualisation – Percentage per vehicle type



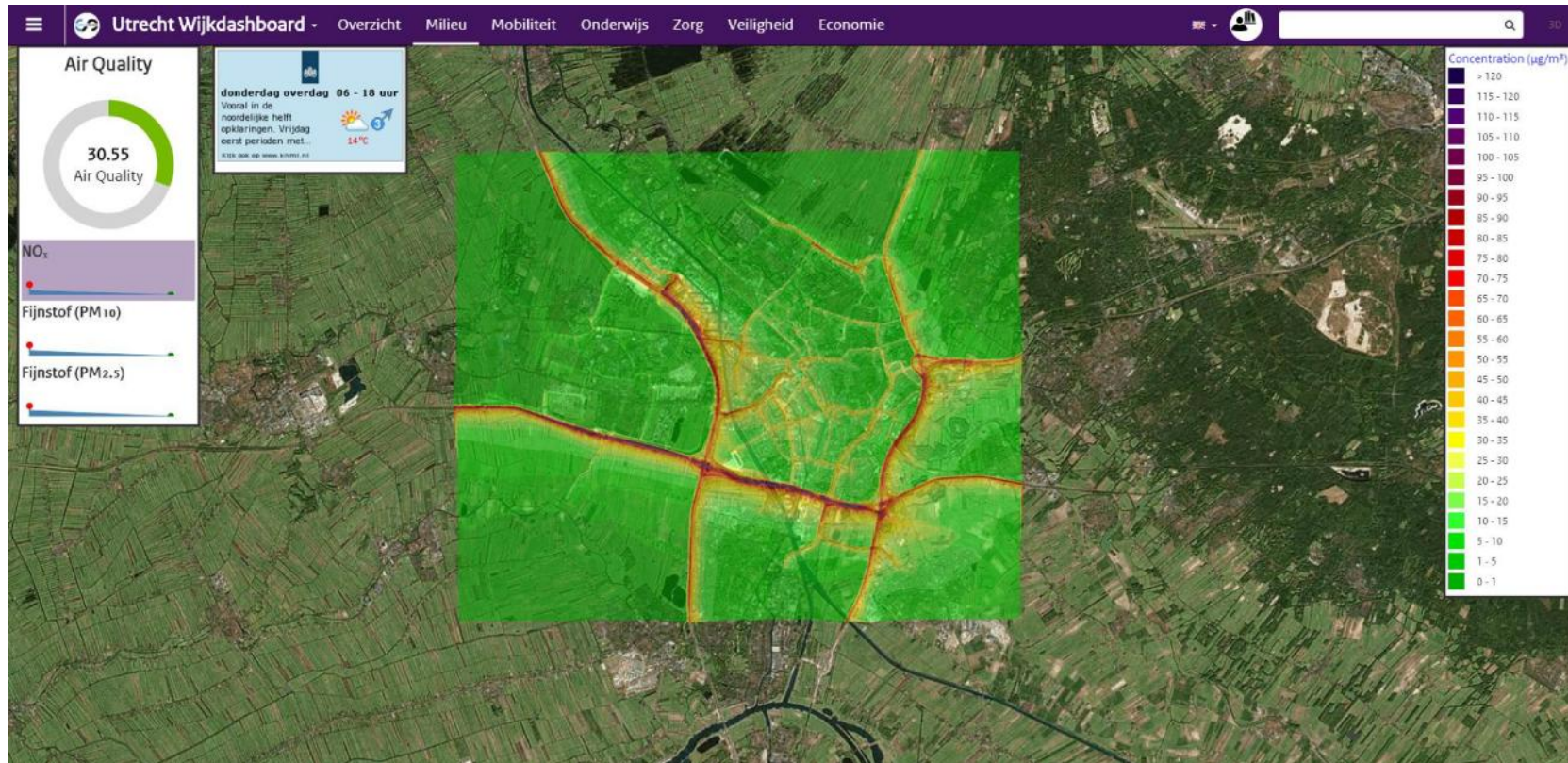
Visualisation – Logistic markets



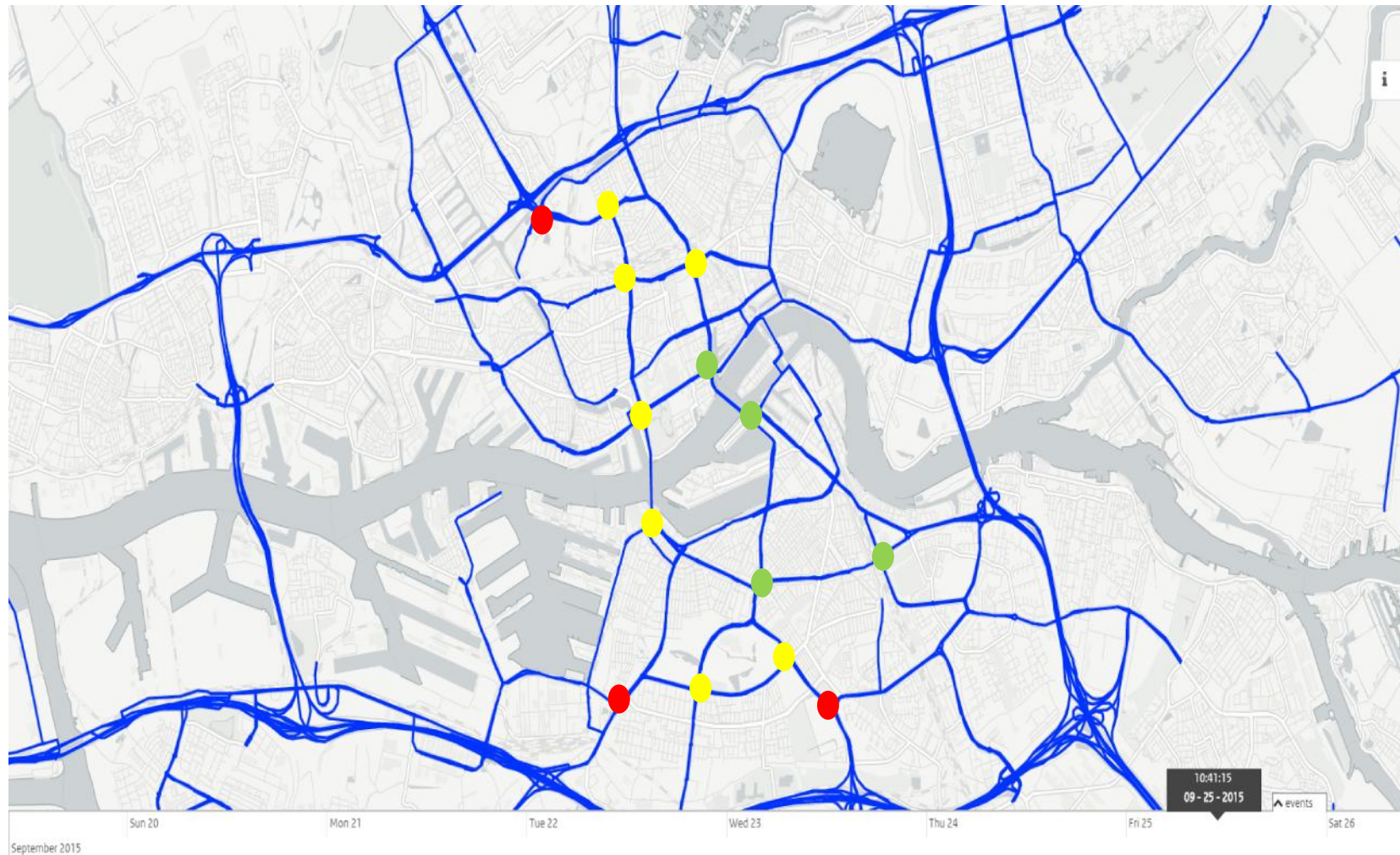
Visualisation – Maximum speed



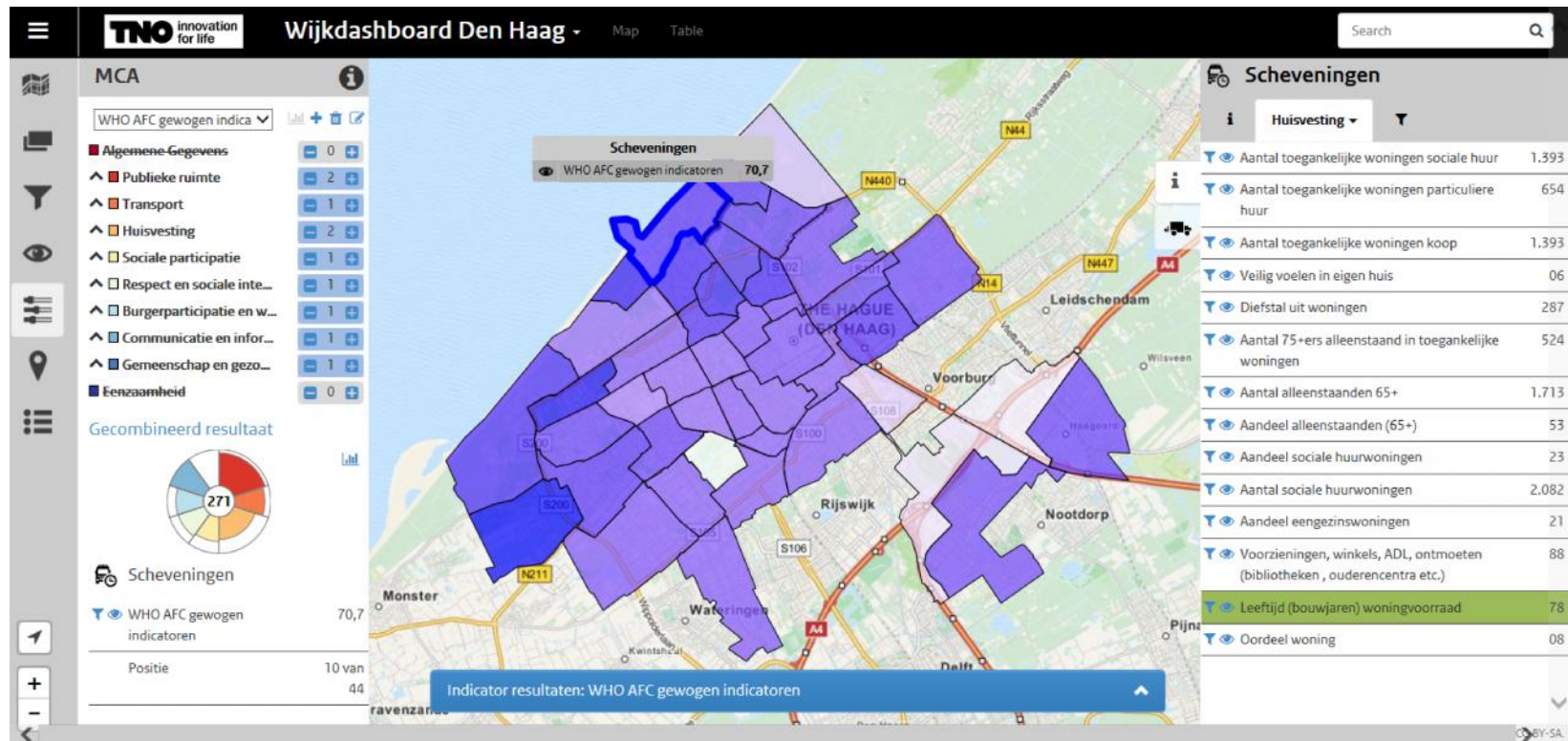
Visualisation – Air quality



Visualisation – Traffic lights



Visualisation – Demographical data



Questions?

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