

MAST



from
Road Safety
Analysis

Market Analysis & Segmentation Tools - Providing Customer Insight in Road Safety

Improving Insight & Intelligence about Casualties & Drivers

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MAST Project Manager

Thames Valley Safer Roads Partnership



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“A Safer Way” – Vision for the Future

- Published by DfT in April 2009



- “Consultation on making Britain’s roads the safest in the world ... the vision, targets and measures for improving road safety in Great Britain for the period beyond 2010”
- “We have been particularly keen to understand where collisions happen, **who is involved** (age, gender, socio-economic group), what they are doing and why” *Page 7*

“A Safer Way” – Making Data Work

- “A first key focus of this strategy is on improving the delivery of road safety through **better use of data**” *Page 13*
- “a key role for national Government in the new strategy is to **provide our delivery partners with the information** and support they need to carry out their roles as well as they can” *Page 37*
- “We constantly seek to **improve and expand our existing data** sources to develop our understanding of road safety trends” *Page 41*



“A Safer Way” – Key Actions

- “We want to see ... improved organisation which reduces casualties through **more intelligent use of road safety data** at national and local level ... [and] improving the quality of our data to help us to **target our interventions** more effectively”
Page 40
- “We will work to provide an online database combining accident and socio-demographic data for access by local authorities. This will allow ready local analysis of collision statistics by social and geographical groupings.” *Page 88*



MAST Project Overview

- Integrate UK STATS19 data with socio-demographic profiles
- Deliver a national online data tool
- Ease of analysis for **non-specialists**
- Support from government
 - Development funded by DfT
 - Integral part of future strategy
 - In step with focus on customer centred delivery

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Background

Project originated in Thames Valley in 2006

Purpose: Integrate Data and Communications

Goal: *Headline Data* collision analysis tool

Benefits

- Instant and easy access to detailed information
- Applied tried and tested market analysis techniques
- Improved collaboration between partners



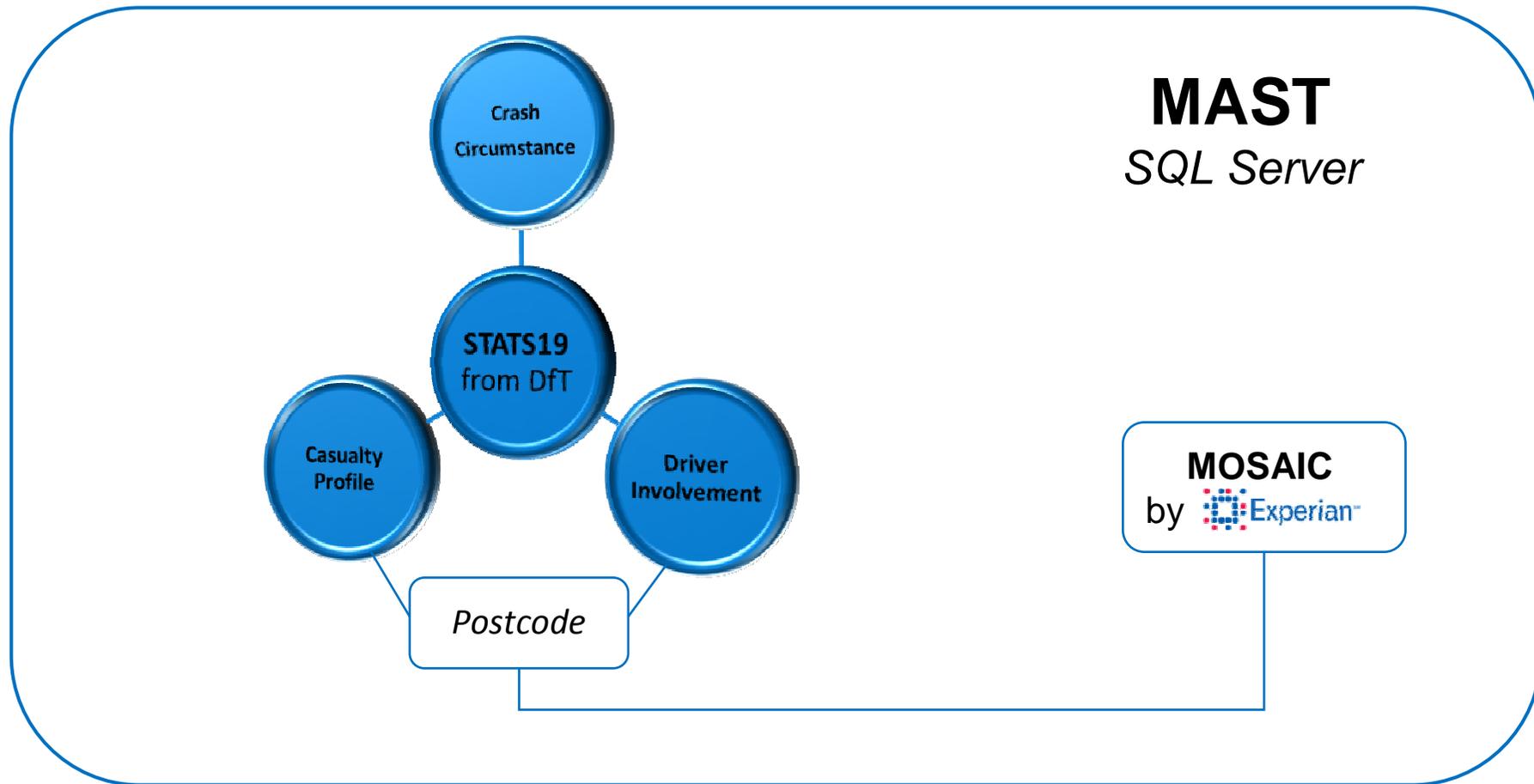
MAST - The Story So Far

- Success of *Headline Data* led to Prince Michael Award
- DfT Partnership Grant funding for national development
- Data collected and integrated
 - National STATS19 data from DfT
 - Socio-demographic profiling data from Experian
- Internet identified as delivery route of choice
- Development team appointed
- Steering Group of road safety professionals established

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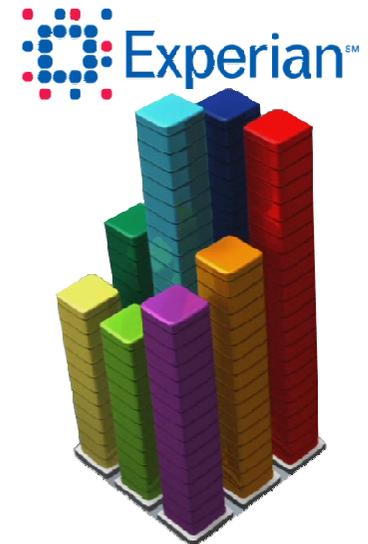


Building Blocks of MAST



Mosaic – a brief overview

- Market leading geo-demographic database
- Household or postcode detail
- Defines communities within
 - 11 groups
 - 61 types
- Each with full portrait



Example of a MOSAIC type

Type H44 Manual workers, many close to retirement, in low rise houses in ex-manufacturing towns



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Headline Data Real Life Sample Studies

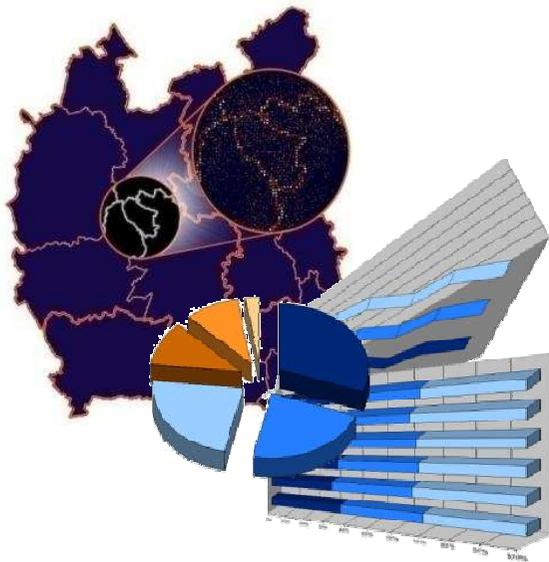
*Three examples of the real value of
integrated data from Thames Valley*



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Area Profiling – Data Provision



- Detailed overview informs strategic planning
- Individual report for each district
- Uniform data presentation
- Regional comparisons based on
 - Demographic data
 - 2010 progress reports
 - Vehicle type analysis
 - Mosaic analysis
 - Enforcement information

Area Profiling – Data in Practice

- Partner authority identified trend from Area Profile
 - High rate of certain crash and offence types
 - Rate presented relative to population
 - Planning in response to and informed by facts
- ‘Speed Month’
 - Increased level of speed enforcement
 - Deployment of Vehicle Activated Signs
 - Targeted publicity
- Increased levels of Red Light enforcement

Motorcycle Campaign - Planning

- Analysis carried out using *Headline Data*
- Profiles of 'at risk' types
- Creation of archetypes
- Communications Plan
 - Outdoor advertising
 - Washroom advertising
 - Website



Motorcycle Campaign - Delivery



Campaign Idea – The Plan

- Campaign idea from highways authority
- Target young drivers at risk from mobile phone use while driving
- Scratch cards with safety messages
- Distribution through fast food chain



Mobile Phones



Campaign Idea – The Reality

- Required report using *Headline Data*
- Initial analysis to final report – 2 hours
- Findings showed disconnect between campaign appeal and target audience
- Advice resulted in campaign being withdrawn



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MAST Beta Test version demonstration

*Delivering the Vision
Progress to date*



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Road Safety Analysis website

<http://www.roadsafetyanalysis.org>

Road Safety Analysis

MAST Beta Test | Contact Us | Useful Links | Accessibility | Site Map

Home | News and Views | Projects | Samples

Welcome to the Road Safety Analysis website - home of the MAST Project

What is MAST?
find out more

| Region | Value |
|------------------|-------|
| East | 210 |
| London | 200 |
| South East | 180 |
| West Midlands | 170 |
| North West | 150 |
| Yorkshire | 100 |
| Wales | 80 |
| Northern Ireland | 50 |

Latest News

- Aerandi chosen for MAST Web Development**
MAST has announced that its cutting edge
April 2nd, 2009
- Here Be Dragons - the problem of geography**
We've all heard the urban myth about
March 31st, 2009
- MAST seen as beacon of best practice**
Transforming all aspects of government to
March 30th, 2009

User Login

In order to access our member pages please enter your username and password.
[Apply for membership](#) or [retrieve lost login details](#).

User Login

Department for Transport **MAST**

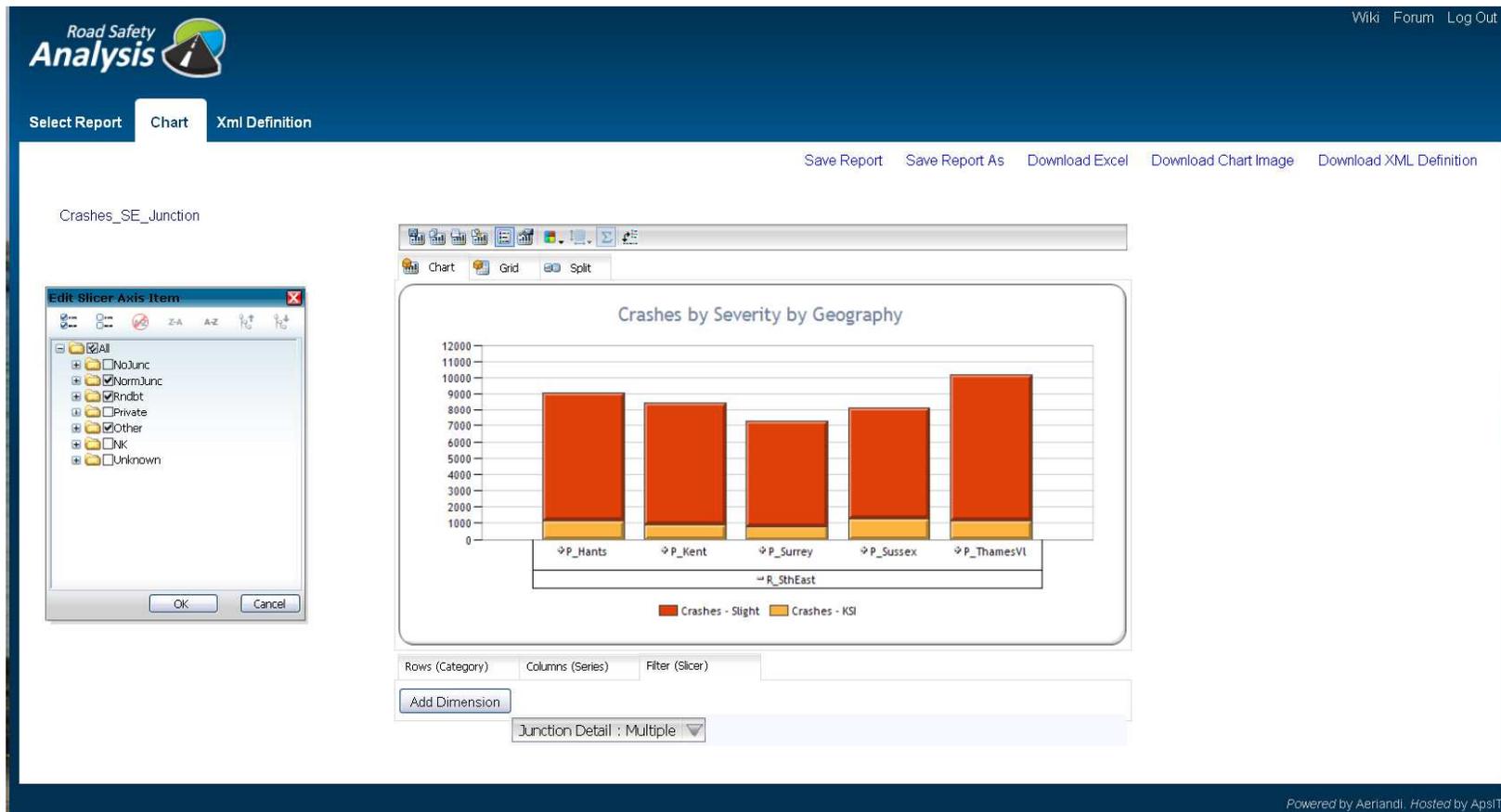
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Using MAST Online

MAST Beta Test site



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MAST Demonstration Example Case Studies

*Two examples of using MAST in
support of planning and intervention*



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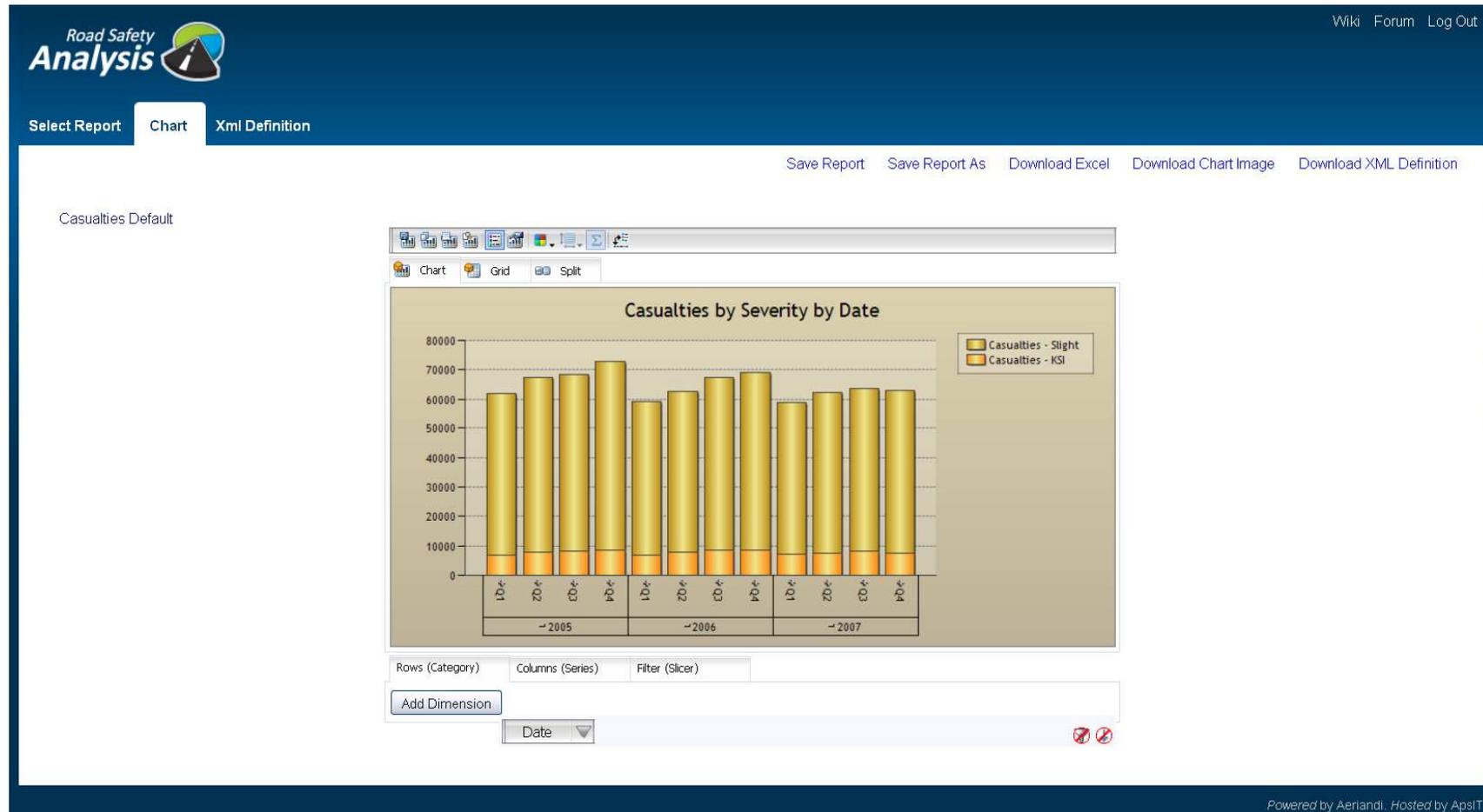
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MAST Example Case Studies

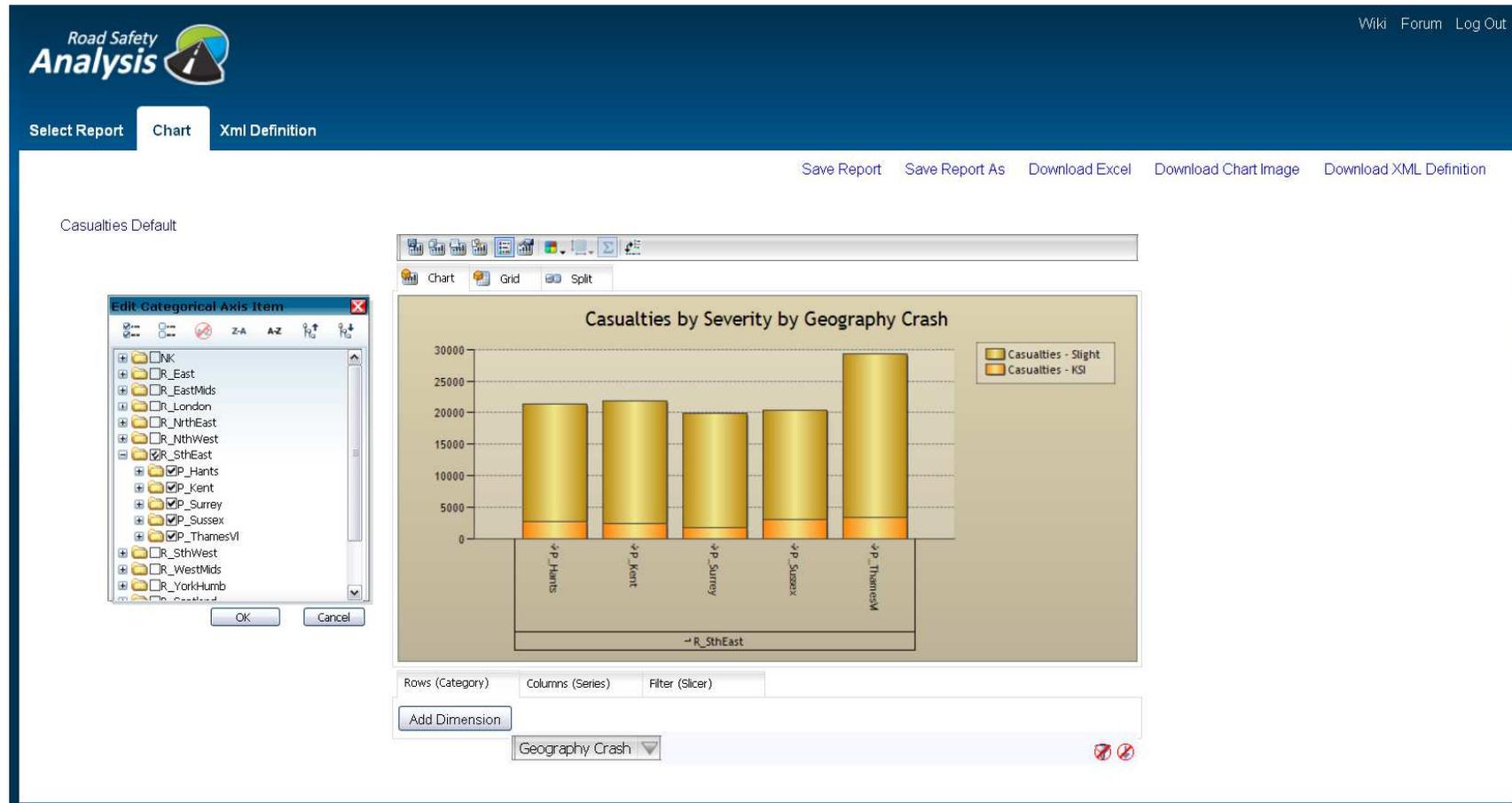
- Strategic funding priorities
 - Co-operation between SE authorities
 - Improvements to pedestrian environment
 - Most vulnerable ages
- ETP campaign
 - Motorcycle safety information
 - Local media in South East of England



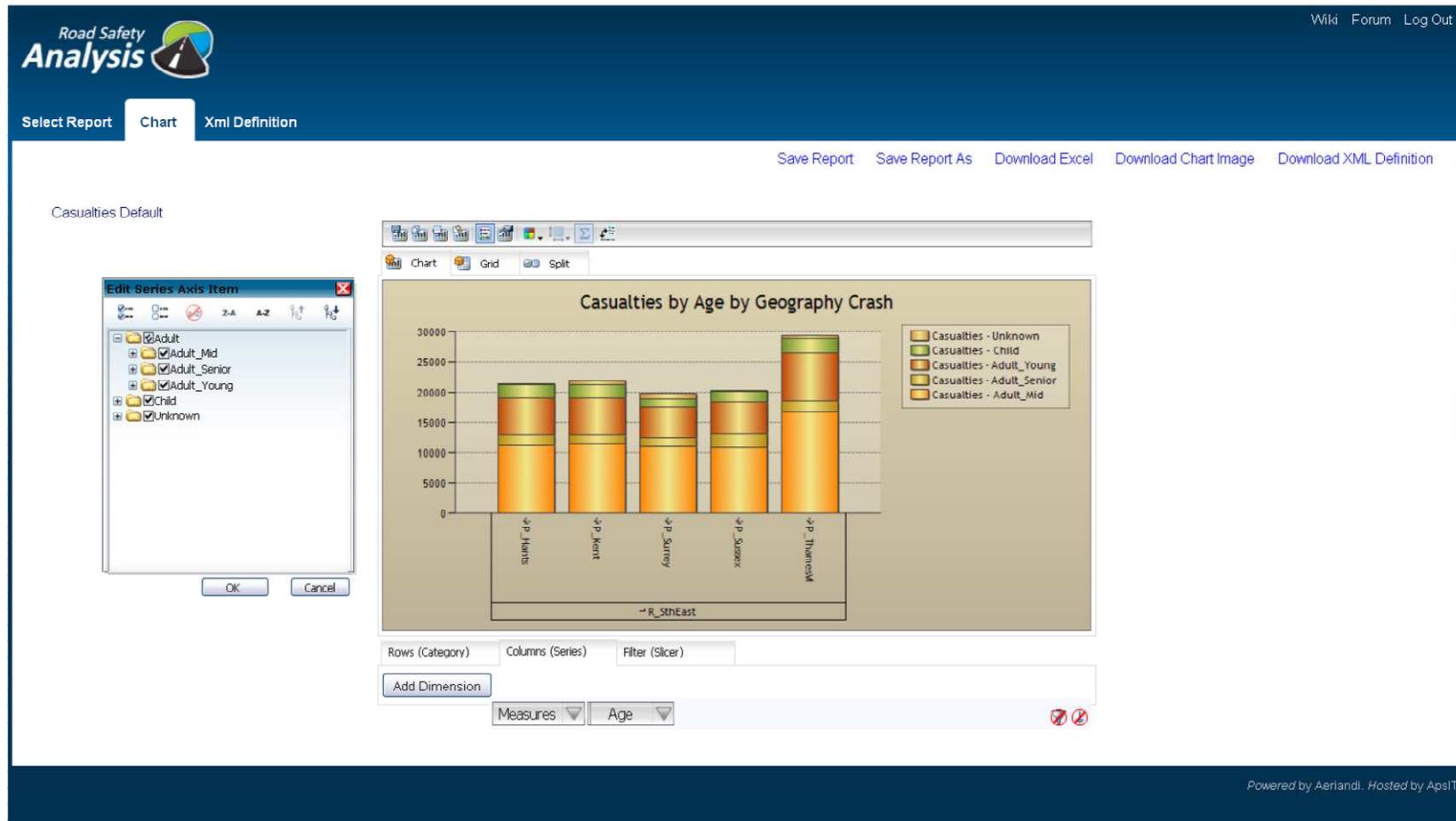
Strategy - getting started



Strategy – Categorise by Location



Strategy – Series by Casualty Age



Strategy – Filter by Casualty Class

Road Safety Analysis Wiki Forum Log Out

Select Report **Chart** Xml Definition

Save Report Save Report As Download Excel Download Chart Image Download XML Definition

Casualties Default

Edit Slicer Axis Item

- All
- InVehicle
- Pedestrian
- Unknown
- Unknown

OK Cancel

Casualties by Age by Geography Crash

| Geography | Casualties - Unknown | Casualties - Child | Casualties - Adult_Young | Casualties - Adult_Senior | Casualties - Adult_Mid |
|------------|----------------------|--------------------|--------------------------|---------------------------|------------------------|
| -P_Hants | ~100 | ~800 | ~400 | ~300 | ~400 |
| -P_Kent | ~100 | ~900 | ~400 | ~300 | ~400 |
| -P_Surrey | ~100 | ~300 | ~100 | ~100 | ~100 |
| -P_Sussex | ~100 | ~700 | ~300 | ~300 | ~400 |
| -P_ThamesM | ~100 | ~600 | ~300 | ~300 | ~400 |

Rows (Category) Columns (Series) Filter (Slicer)

Add Dimension

Casualty Class : Pedestrian

Strategy – Analysing Detail

Road Safety Analysis  Wiki Forum Log Out

Select Report **Chart** Xml Definition

Save Report Save Report As Download Excel Download Chart Image Download XML Definition

Casualties Default

Casualties by Age by Geography Crash

| | | Casualties | | | | | | | |
|--------------|--------------|-------------|--------------|-------------|-------------|-------------|------------|--------------|-------------|
| | | Adult | | | Child | Unknown | Total | | |
| | | Adult_Mid | Adult_Senior | Adult_Young | Total | | | | |
| R_ThamesVI | P_Hants | 703 | 304 | 452 | 1459 | 732 | 39 | 2280 | |
| | P_Kent | 750 | 289 | 438 | 1477 | 918 | 122 | 2517 | |
| | P_Surrey | 410 | 160 | 204 | 774 | 316 | 137 | 1227 | |
| | P_Sussex | G_SussexE | 572 | 252 | 295 | 1119 | 433 | 6 | 1558 |
| | | G_SussexW | 280 | 141 | 122 | 543 | 265 | | 808 |
| | Total | | 852 | 393 | 417 | 1662 | 698 | 6 | 2366 |
| | P_ThamesVI | G_Berks | 366 | 106 | 158 | 630 | 274 | 32 | 936 |
| | | G_Bucks | 231 | 77 | 147 | 455 | 208 | 13 | 676 |
| | | G_Oxon | 231 | 77 | 105 | 413 | 186 | 20 | 619 |
| | Total | | 828 | 260 | 410 | 1498 | 668 | 65 | 2231 |
| Total | | 3543 | 1406 | 1921 | 6870 | 3382 | 369 | 10621 | |

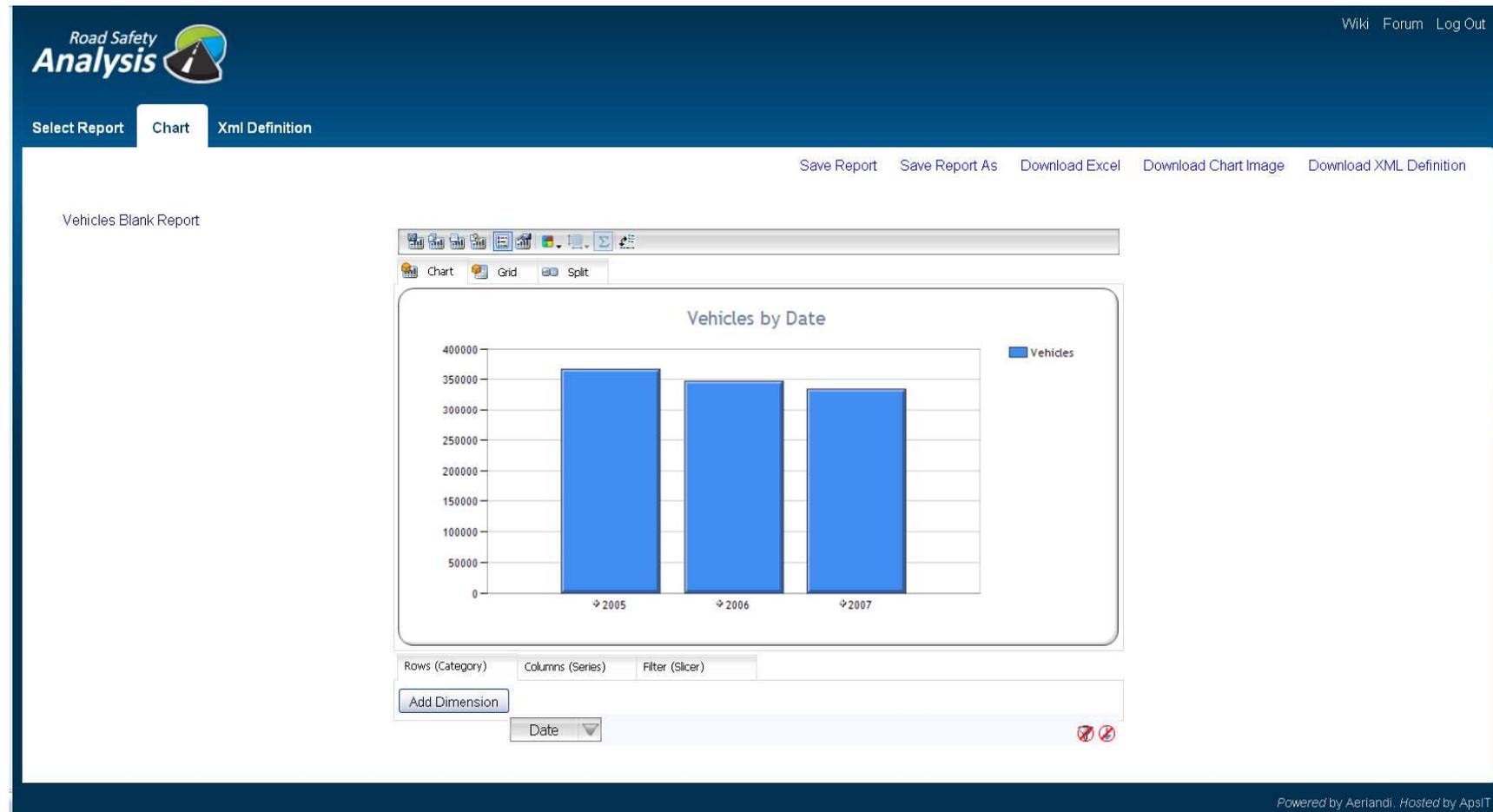
Rows (Category) Columns (Series) Filter (Slicer)

Add Dimension

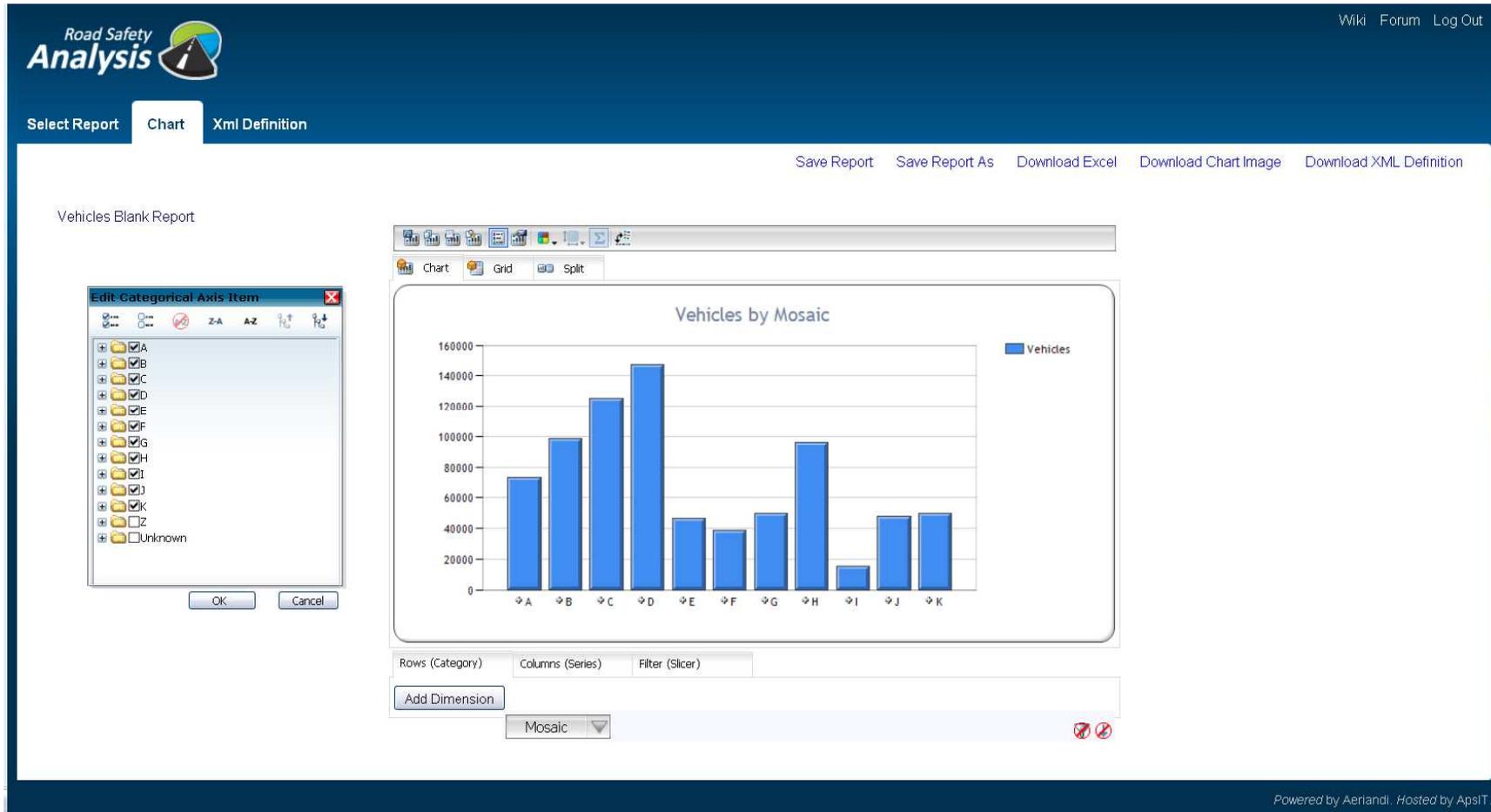
Casualty Class : Pedestrian

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Motorcyclists - getting started



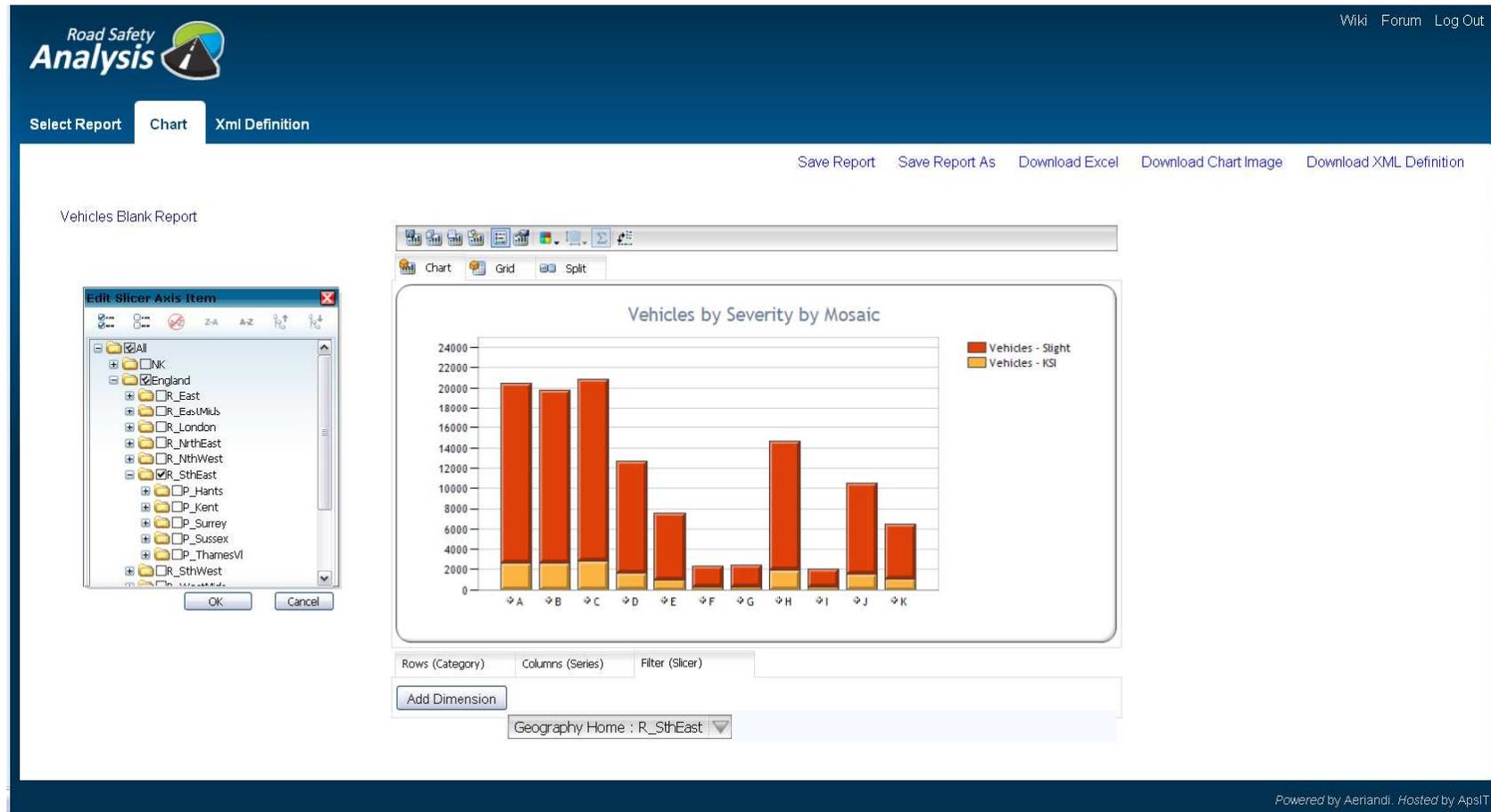
Motorcyclists – Categorise by Mosaic



Motorcyclists – Series by Severity



Motorcyclists – Filter by Home Postcode



Motorcyclists – Filter by Vehicle Type

Road Safety Analysis [Wiki](#) [Forum](#) [Log Out](#)

Select Report **Chart** Xml Definition

Save Report Save Report As Download Excel Download Chart Image Download XML Definition

Vehicles Blank Report

Edit Slicer Axis Item

- All
- Motor
 - Motorbike
 - Car
 - Bus
 - Goods
 - MiscMotor
- NonMotor
- Unknown
- Unknown

OK Cancel

Vehicles by Severity by Mosaic

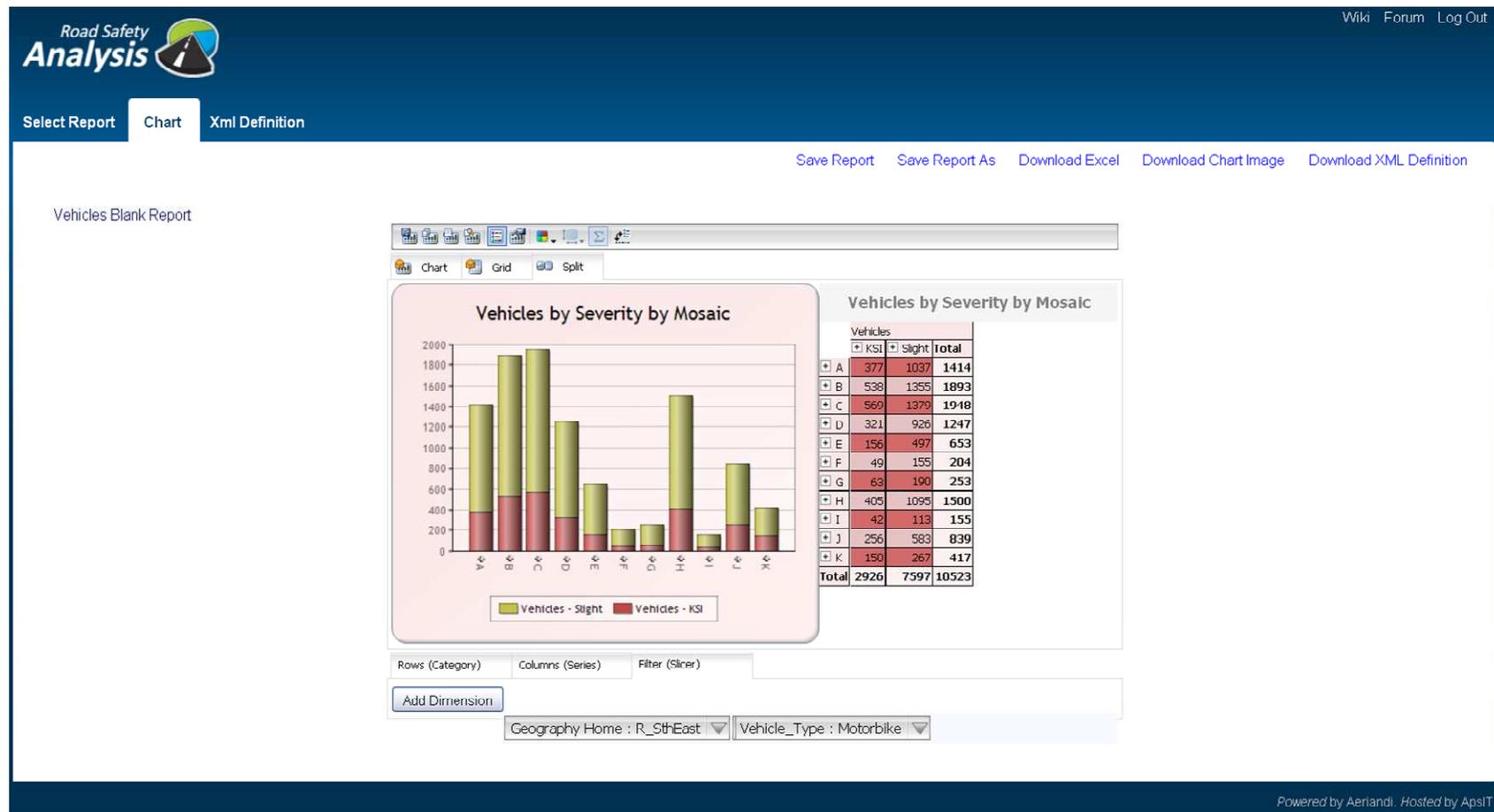
| Category | Vehicles - Slight | Vehicles - KSI |
|----------|-------------------|----------------|
| A | 1050 | 350 |
| B | 1350 | 500 |
| C | 1400 | 550 |
| D | 900 | 300 |
| E | 450 | 150 |
| F | 150 | 50 |
| G | 100 | 50 |
| H | 1100 | 400 |
| I | 100 | 50 |
| J | 550 | 250 |
| K | 250 | 150 |

Rows (Category) Columns (Series) Filter (Slicer)

Add Dimension

Geography Home : R_SthEast Vehicle_Type : Motorbike

Motorcyclists – Customise



Motorcyclists – Save

Road Safety Analysis Wiki Forum Log Out

Select Report **Chart** Xml Definition

Save Report Report Name: SE_Bikers_Mosaic Save As Cancel Download Excel Download Chart Image Download XML Definition

Vehicles Blank Report

| Vehicles | KSI | Slight | Total |
|--------------|-------------|-------------|--------------|
| A | 377 | 1037 | 1414 |
| B | 538 | 1355 | 1893 |
| C | 569 | 1379 | 1948 |
| D | 321 | 926 | 1247 |
| E | 156 | 497 | 653 |
| F | 49 | 155 | 204 |
| G | 63 | 190 | 253 |
| H | 405 | 1095 | 1500 |
| I | 42 | 113 | 155 |
| J | 256 | 583 | 839 |
| K | 150 | 267 | 417 |
| Total | 2926 | 7597 | 10523 |

Rows (Category) Columns (Series) Filter (Slicer)

Add Dimension

Geography Home : R_StEast Vehicle_Type : Motorbike

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Motorcyclists – Download

Road Safety Analysis

Wiki Forum Log Out

Select Report Chart **Xml Definition**

Save Report Save Report As Download Excel Download Chart Image Download XML Definition

SE_Bikers_Mosaic

| | KSI | Slight | Total |
|--------------|-------------|-------------|--------------|
| A | 377 | 1037 | 1414 |
| B | 538 | 1355 | 1893 |
| C | 569 | 1379 | 1948 |
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| K | 150 | 267 | 417 |
| Total | 2926 | 7597 | 10523 |

Opening OlapReport2Excel.xls

You have chosen to open

OlapReport2Excel.xls
which is a: Microsoft Office Excel 97-2003 Worksheet
from: http://62.172.190.10

What should Firefox do with this file?

Open with Microsoft Office Excel (default)

Save File

Do this automatically for files like this from now on.

OK Cancel

Rows (Category) Columns (Series) Filter (Slicer)

Add Dimension

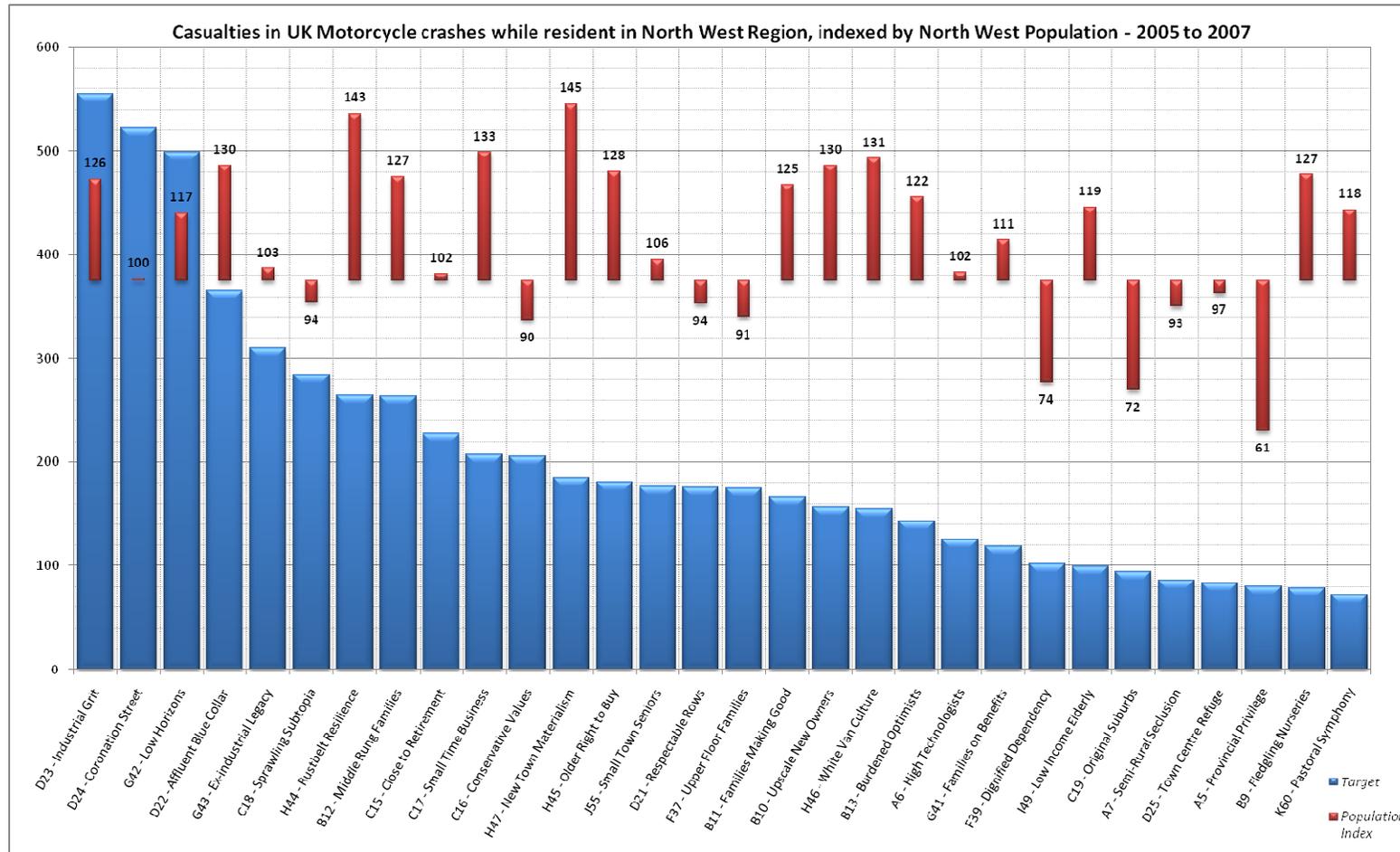
Mosaic

Delivery of MAST

- Beta testing now in progress
- Initial version launch events in Sept - Oct 2009
- Full release - March 2010
- Available online to public sector practitioners
 - Initially free of charge
 - Small subscription in future
 - Excellent accessibility
 - Cutting edge data tool for meaningful analysis
 - Easy integration of new data



MAST – the Final Version



Future Plans

- Public access to STATS19 data
- Improved use of existing data
- Integrating additional datasets
 - Enforcement data
 - Indexes by average annual mileage
 - Comparisons with most similar authorities
- Sharing of best practice



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