



Introduction

A 'Storython' took place in the Lifecourse Building (ILAS) at NUIG on Friday 27th October 2017 from 4pm to 7pm as part of the Your Data Stories EU Horizon 2020 project www.yourdatastories.eu.

The event involved 3 multi skilled teams with the assistance of experts creating stories using traffic data and project data from Galway City using the YDS platform www.platform.yourdatastories.eu and other story building tools.

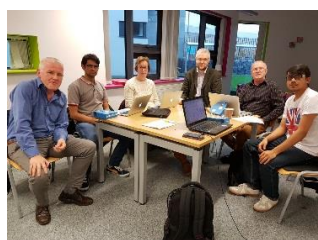
The expected high-level outcomes of the event were twofold:

- **Create stories.**
- **Document the process.**

The Storython involved 3 teams of 5 people, with each team working to create the best digital story from the data available. All registered participants were briefed in advance. Each participant was invited to bring their own laptop and most of them did. Wifi was available. There were also 5 people from Insight running different aspects of the workshop and 1 person from Galway City Council.

The skillsets of the participants at the event were as follows:

- **Data experts (to manipulate and organise the data)**
- **Journalists / Bloggers (to write the story)**
- **Programmers / IT specialists (to provide IT skills)**
- **Business analysts (to document the process)**
- **Community activists with an interest in transport (to discuss Galway transport)**



Programme Agenda

4.00pm	Briefing session
4.30pm	Guided story creation
5.30pm	Food (no break)
6.30pm	Teams tell their stories (facebook live broadcast optional)
7.00pm	Close of event

Tea and coffee were available for the duration of the event.

Mentors and Participants

Mentors

1	Niall Ó Brolcháin – Insight Centre for data analytics – Event co-ordinator
2	Lukasz Porwol – Insight Centre for data analytics – Social media advisor / Dissemination
3	Maciej Janowski – Insight Centre for data analytics – Data advisor
4	Heike Vornhagen – Insight Centre for data analytics – Visualisation advisor
5	Grainne Faller – Insight Centre for data analytics – Media advisor
6	Martin McElligott – Galway City Council – Galway Transportation Unit

Team 1

1	Aftab Alam
2	Shane Foran (Storyteller)
3	Caroline Kelly Stanley
4	Suchandra Mandal (Visualisation)
5	Ihsan Ullah (Process recorder)

Team 2

1	Riti Chakraborty (Visualisation)
2	Caoimhín Ó Maolallaigh (Storyteller)
3	Ihab Salawdeh (Visualisation)
4	Brendan Smith
5	Umair Ul Hassan (Process recorder)

Team 3

1	Ashfaque Azad
2	Peter Butler
3	Brendan Holland
4	Ann O'Brien (Storyteller and Process recorder)
5	Nivranchu Pasricha

The Brief

Participants in the YDS Storython were given an overview of the YDS project (www.yourdatastories.eu) by Niall Ó Brolcháin of the eGov unit at Insight. This was followed by a demonstration of the YDS platform (<http://platform.yourdatastories.eu>), with particular reference to the 20 public projects selected for special attention jointly by Galway City Council (www.galwaycity.ie) and the Insight Centre for Data Analytics (www.insight-centre.org) @ NUI Galway (www.nuigalway.ie). The new YDS Galway traffic observation dashboard was then demonstrated.

Insight media manager, Grainne Faller gave a presentation as to what constitutes a good story giving a brief overview of how to construct one.

Visualisation specialist Heike Vornhagen gave details of the importance of visualisation for data stories.

Insight researcher Maciej Janowski briefly explained the available data.

Lukasz Porwol of Insight explained the story telling and dissemination process which would take place at the end of the workshop.

Martin McElligott of the Galway City Council transportation unit explained the Galway City Council's role in YDS and said a few words about the data.

Participants were given the opportunity to ask questions. However, it was decided by consensus to move on to the examination of the data and the construction of stories using the YDS platform.

Participants were separated into 3 teams. One storyteller and one process analyst were selected for each team. Two of the teams also decided to appoint people to look at the visualisation aspects of the stories. They were asked to select at least one of the public projects presented and examine the impact that these projects might have had on traffic by using the YDS traffic observation dashboard. After some discussion, the teams separated into three different rooms.

The six mentors were initially allocated to specific teams and then moved from team to team depending on demand.

The Amalgamated Storytelling Process

While each of the three multi-disciplinary teams adopted a slightly different process in terms of co-creating their data stories, there were common steps for all which have allowed us to identify an amalgamated process (See below) using feedback and observations from the 3 teams. While all three teams followed the steps of the amalgamated process, none of them went through the process in precisely the same order.

Amalgamated process to co-create data stories with a multi-disciplinary team on the YDS Platform

Step 1: Identify resources using the YDS platform

Step 2: Selection and agreement of the story topic

Step 3: Story title selection

Step 4: Data collection and comprehension

Step 5: Gap analysis

Step 6: Collection of external data to support and verify the story and to fill in the gaps

Step 7: Analyse and visualize the data

Step 8: Identify any patterns, understand and then create the story outline

Step 9: Construct and write the story

Step 10: Story polishing and editing by the mentors

Step 11: Team members give feedback on the final story

Step 12: Publish the story on the YDS platform

Findings

1. All teams identified that more detailed data would have provided stronger stories.
2. Interaction between those who already had anecdotal evidence or preconceptions in relation to stories about public projects and those who were gaining their knowledge directly from the data for the first time ensured a robust exchange of views.
3. This process and access to the data via YDS allowed all participants to gain a greater insight into the public projects.
4. Interaction with a knowledgeable official from the Council was of immense benefit to all teams.
5. Mixing of data from the YDS platform was achieved and helped to inform the stories that were selected by the three teams.

Stories

Team 1 - An insight on the bus corridor in the green belt

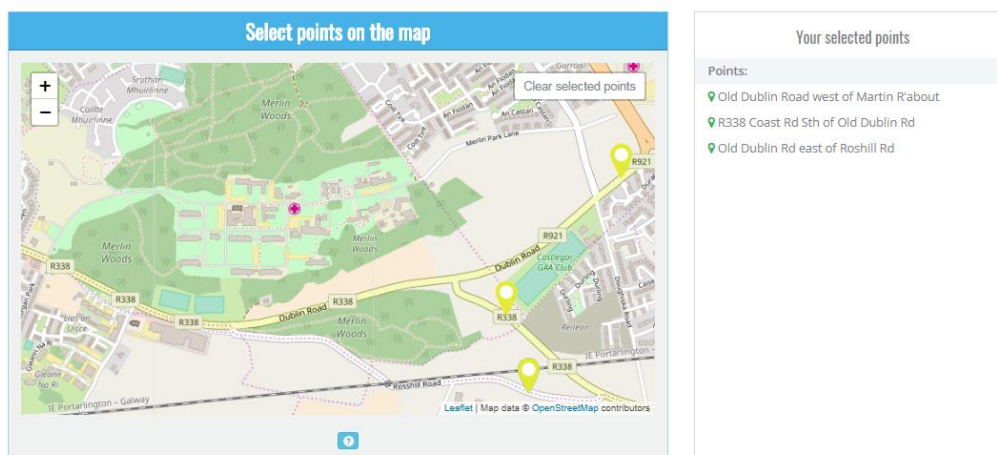
Team 1 decided to look at the Merlin Park hospital bus access. This is a €1million project commissioned by Galway City Council.

Description

Planning and design work: Completion of design development work on this project and the preparation of a statutory planning process application. This project will deliver a new junction and access road with on-road cycleway, approximately 350 metres long commencing at Dublin Road / Galway Crystal junction and finishing at Merlin Park Hospital, providing safer access / egress to Merlin Park Hospital for all road users. It will also connect directly to the existing Dublin Road bus lane and, through linking with the UTM system, will reduce delays for buses exiting Merlin Park.

Traffic observations for the city of Galway

Select points on the map, year and time ranges, vehicle types and traffic directions to filter the traffic observations and display details about them in the visualisations below.



<http://platform.yourdatastories.eu/galway-traffic-observation>

What is proposed?

There is a proposal for a bus corridor through the campus of Merlin Park hospital linking with the suburb of Doughiska. A new entrance to the Merlin Hospital campus would be created at the Galway Crystal Junction. From here a new road would be constructed through existing woodlands. This will connect to the existing Merlin Park internal roads and then through to Doughiska using Merlin lane - a minor residential road at the back of Merlin Park Hospital.

Questions:

What are the benefits?

What are the environmental impacts?

What will happen for other road users?

What will happen for local residents?

Resources Identified

- YDS traffic observation demo website
- List of topics
- MS Excel - Data in excel/csv files
- R Studio
- Google Maps

What are the benefits of this road?

It could provide a shortcut for buses, so less delay for Public Transport users.

There are traffic problems at the existing entrance to the hospital.

It is difficult for drivers to turn out of the hospital.

There is a sign saying to go to roundabout and doing a u-turn.

It could improve ambulance access? (But hospital does not have an emergency department)

Other road users

It is hard for people to cross the road at the established desire line at the shops at Merlin. This project will not help these people.

Other impacts: who is worried?

Local environmental activists and local residents are worried. The environmentalists are concerned at loss of woodland amenity and habitat. Local residents are concerned that heavy bus traffic is not suitable for this location. Also, the residents are concerned that opening this route will promote so called “rat-running” by motorists looking for shortcuts around traffic jams. Is catering for through-traffic a suitable use of a hospital campus and minor residential road?

Data issues

To analyse the impact of this proposal we need data on traffic movements at Merlin Park and Merlin lane. This was not available in the dataset provided. However, the data does provide an indicator of demand on this corridor. There were traffic survey sites identified on the old Dublin road near the Galway Clinic and on the Coast Road. Significant motor vehicle counts were observed.

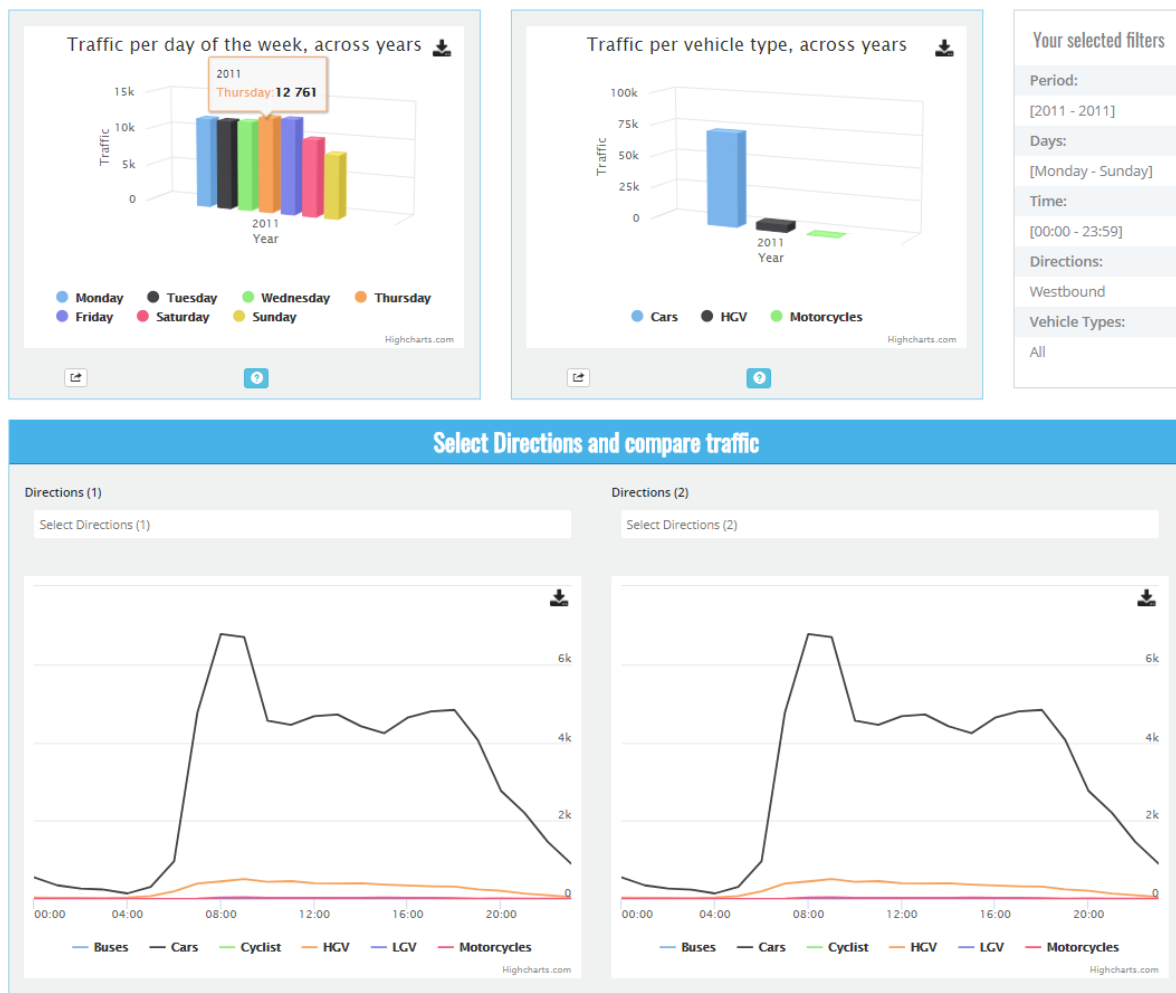
Data recommendations

To draw better conclusions about the impact of this project then ideally more fine-grained data is needed. Particularly things like number of people crossing the road at Merlin, turning movements at

the existing Merlin junction, traffic movements at Merlin lane. Also, important would be origin destination information. What proportion of vehicle drivers already using Merlin Lane and the Hospital Campus actually have business at the site or are simply using it as a short cut? Also, while the data set provided gives the raw number of vehicles it does not indicate things like queue length or “traffic jams” at peak times, so if large inbound queues of traffic are seen at Galway Crystal or the GMIT roundabout then this would create an incentive for some drivers to use the hospital campus as a shortcut.

What the Data says

The figures from the YDS platform clearly show that up to 12,761 cars per day travel down the Dublin Road in a Westbound direction. However, the team clearly identified that traffic data for vehicles using the proposed route of the bus lane through the grounds of Merlin Park Hospital as well as other data would help to provide a more detailed analysis of the project. Martin McElligott of Galway City Council confirmed that traffic data for the route of the proposed Merlin Park busway has been sought for the 2017 cordon count figures and will be made available.



Team 2 - Where to put 3 Park & Ride sites in Galway City

Team 2 looked initially at the Galway City Council project to replace the Lynch roundabout with traffic signals at the Briarhill Junction which according to local activists and local media is the site of major traffic holdups on a regular basis. However, the team then went on to look at the potential solution of developing a Park and Ride site to reduce traffic. They further analysed the data on the YDS platform to see what was feasible.

Project Description



To replace the Lynch Roundabout with a signalised junction. The proposed upgrades will consist of the removal of the existing roundabout and replacing it with a signalised junction, with pedestrian crossings and cycling facilities as well as all ancillary signage, signals and lighting.

Further Analysis of potential Park and Ride Sites

The team examined the car traffic data on the approach roads into Galway City to determine the best location for 3 park and ride facilities. Such park and ride facilities will allow motorists and their passengers park at the outskirts of the city and take public transport (bus and potentially light rail in the future) into the city centre and other key destinations (Parkmore Industrial Estate, GMIT, NUIG etc.). Examine patterns, calculate mean overall traffic into Galway on each approach road during morning commuting time (6:30am – 9:30pm) and evening commute home time (4pm – 6pm). From comparisons of overall commuter time traffic from all approach roads to the city, determine which approach roads carry the most commuter traffic and from these figures rank each approach in order of traffic volumes – from this analysis, 3 best locations will be agreed. We will also examine the possibility of approach roads sharing a park and ride facility (R336 and N59) at the edge of the city.

Resources Identified

- MS Excel
- Google Maps
- YDS Platform
- Google Drive

Findings

The team wanted to look at the traffic figures for the main traffic arteries in and out of Galway City. They looked for the breakdown in terms of cars only. Other vehicles were not considered for assessing the potential of Park and Ride schemes.

1. A total of 21,880 cars used the Barna road (R336) in the sample week in 2016.
2. The Moycullen road (N59) was used by 37,458 cars in the sample week on their way in and out of Galway City in 2016.
3. The Headford Road (N84) sampling point showed 52,812 cars travelling in and out of Galway City in the sample week of 2016.

- There were 49,336 cars counted on the Tuam Road (N17) sampling point for the week in 2016.
- The main N6 route into Galway City was used by 72,189 cars in the sample week in 2012. No figures were available for this route in 2016.
- The combined car usage of the R338 and the N67 connecting Oranmore with Galway City showed a total of 92,349 in 2016.



Conclusion

There is a much greater need for park and ride facilities on the East of Galway City than on the West.

Team 3 – Smart Citizens make for smarter journeys in Galway

Team 3 decided to look at the overall impact of schools in terms of generating traffic. Below are figures from the YDS platform showing a massive decrease in vehicles at weekends, on Taylors Hill Road which is anecdotally used mainly for schools traffic in the mornings. This is consistent across years. Below is the story that the team constructed.

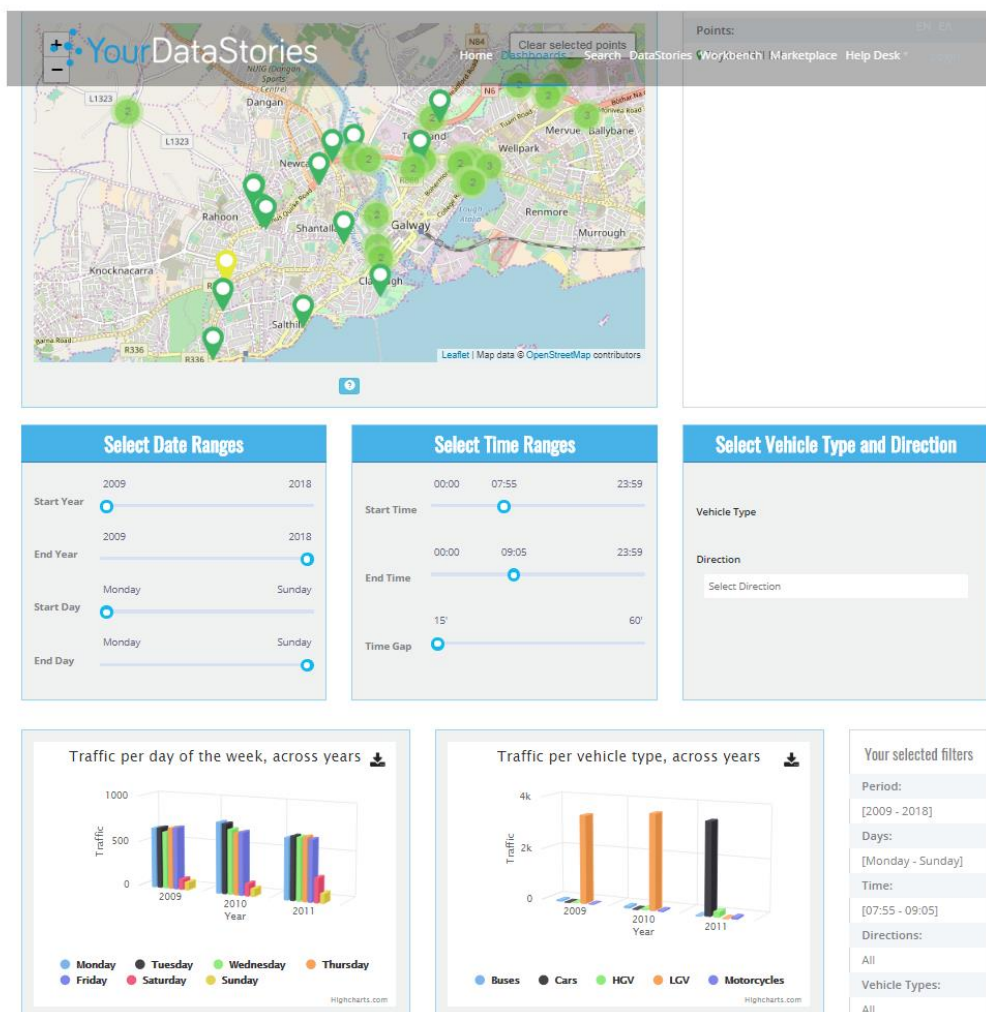
Story

Have you ever noticed Galway traffic is much quieter on the days when kids are off school? Several people had at the YDS Storython, so it was decided to look at the official council traffic data available on the YDS platform to find some answers, but the data available could only show part of the story.

The council counts traffic annually by volume at predetermined locations around the city. The 2016 data shows traffic volumes on the 18th to 24th of November. In the past it was a manual count, but now video is used. The purpose of the traffic count has been to model road capacity. But this data tells almost nothing about the journeys that are undertaken.

It is important to understand what kind of journeys are taken in the city so that smart decisions can be made regarding the right traffic, travel and service solutions for Galway. Now is the time to implement new technology for gathering data that can provide detailed and immediate information about journeys. So where is the data that can describe the impact of school journeys on Galway traffic? We have heard that new technology is being examined by the council that include the use of Bluetooth sensors and the distribution of chips to record journeys.

The limitations identified in the traffic data currently available meant that it was unfit for purpose, when answers to important questions in relation to Galway traffic journey time and length were sought. The CSO Household Survey 2016 figures show that Mobiles or smartphones were used to access the Internet by 83% of individuals and 96% of individuals in the 16-29 years age group. Why not use data from people already making the journeys? There are apps available that could be downloaded, it just needs to be co-ordinated. Then if a new service or behaviour change is identified, ask the people what they think. Smarter citizens can help to supply a much more complete set of journey data in Galway and with the council, help to find some solutions to the traffic problems in Galway.



Telling the stories



The 3 teams at the YDS Storython all recounted their stories and experiences to each other at the end of the event. Participants were also offered the opportunity to tell of their stories on the EGov News facebook site.

(<https://www.facebook.com/newsegov>).

At the time of writing there have been over 5,000 views of the live videos about the event. These videos provide an interesting record of the YDS Storython 2017.

