

Analysis Journal—RAC Parking Report Automation

mz

Saturday 9.3.2019

- Initialised public github repo.
- Setup folder structure, currently looks like this (output of `tree --charset=ascii -d`):

```
|-- code
|-- data
|   |-- 01-raw
|   |-- 02-interim
|   `-- 03-processed
|-- docs
|   |-- admin
|   |-- journal
|   `-- original-reports
|-- figures
`-- outputs
    |-- instructions
    |-- reports
    `-- technical-appendix
```

- available reports used for development, downloaded from RAC press website, pdfs stored in `/docs/original-reports`, see appendix for full table

Next steps: find data

Thursday 14.3.2019

- Look through back reports available, saving all and saving links here, in appendix 1
- Start query file for Ivo.
- OK, got all reports, despite missing years, it looks like most of the data is included in other reports as they have a window of usually 4 years previous that they include data for.
- Now figure out data sources.
- Outline typical England report

England

1. Introduction

- Mainly pure text chunk.
- Available data: `fisc.year`
- Missing data: national parks, Nottingham workplace parking levy? (17/18)

2. Summary

Table 1 - Parking income and expenditure England

- Unit: whole country
- Available data:
 - Off-street: expenditures (sum from LA tables)
 - Off-street: incomes (sum from LA tables)
 - On-street: expenditures (sum from LA tables)
 - On-street: incomes (sum from LA tables)
 - On-street: penalties - single cell on summary sheet
 - Net expenditure on transport - single cell on summary sheet
- That's all, everything else is calculated from this
- Except for the next year budget estimate, that would require importing the budget excel file as well?
Indeed, budget estimates are a part of the report elsewhere as well. . .

Text

- Conditional tree based on data from Table 1.

Figure 1

- Simple line chart based on data from Table 1.

Table 2

- Data from Table 1 for current year, split by London and non-London.

Text

- Conditional tree based on data from Table 2.

3. Income

Text

- Conditional tree based on data from Tables 1 and 2
- Includes footnote on penalty tariffs.

4. Expenditure

Text

- Conditional tree based on data from Tables 1 and 2

5. Surpluses

England data requirements and availability?

- 2017/18 uses “MHCLG tables on parking income and expenditure”

This looks like the data <https://www.gov.uk/government/collections/local-authority-revenue-expenditure-and-financing>.

- For each year there is normally budget, provisional outturn and outturn data, the latter needs to be for individual local authorities, which does not seem to exist for 2007/08, but is available for all other years.
- The files are grouped under the title *Local authority revenue expenditure and financing England: 2010 to 2011 individual local authority data - outturn* for each year
- The relevant Excel file is usually called **Revenue outturn R02 (highways and transport services) + year.xls**.
- There are three columns we are interested in: expenditures, incomes and capital charges, these are usually on separate sheets. There is one of these for both on street and off street parking. So that's 6 columns in total.
- There are also summaries, but I don't need them, maybe only for manually double-checking.
- Appendix 2 lists all the files, their links, the number or rows (local authorities) in the table and the sheets on which the data can be found.
- TODO Add the starting row and the actual columns where the data in question can be found and I can write a function to extract the data automatically.
- Download all **.xls** files to **/data/raw**
- “Earlier, councils also submitted budgets for the 2018-19 financial year but on a less detailed basis.” where are these budgets? Do I need to include them as well? Ah, yes.
- At one point the England data stops including capital charges..2013/14 is last one. This means current reports are less data rich, and if I stick to the brief, it means that the code won't be able to replicate the old reports.
- At one point the England data starts including penalty charges for individual Local authorities, although the reports don't do anything special with that, just use the aggregates
- England totals do not include the national parks and the Nottingham levy. Not sure what to do with that!?
- link <https://www2.gov.scot/Topics/Statistics/Browse/Local-Government-Finance/PubScottishLGFStats>
- link <https://stats.wales.gov.wales/Catalogue/Local-Government/Finance/Revenue/Transport/RoadsAndTransportRevenue-by-authority>

Appendix 1

links to all reports online

country	year	htmls	pdfs	tab	window
England	2010/11	link		link	
	2011/12	link	link	link	2(4)
	2012/13	link	link	link	3(5)
	2013/14	link	link	<-	4
	2014/15	link*	link	link	4
	2015/16	link	link	link	4
	2016/17	link		link	4
	2017/18	link	link	link	4
Scotland	2010/11				
	2011/12	link	link		1
	2012/13				
	2013/14	link	link		3
	2014/15	link	link		4
	2015/16	link	link		4
	2016/17				
	2017/18				
Wales	2010/11				
	2011/12				
	2012/13	link	link		5
	2013/14				
	2014/15				
	2015/16	link	link		4
	2016/17	link	link		4
	2017/18	link	link		4

* link missing from RAC press releases page

** pdf report missing

Columns headings:

- *country*
- *year*—period covered in report
- *html*—link to press release on RAC website
- *pdf*—link to pdf report if exists
- *tab*—link to additional tables if exist (only England)
- *window*—number of previous years' data included in report, number in brackets is for aggregates, not at LA level

Appendix 2

data overview

England

year	link	rows	first	e.sh	e.on	e.off	i.sh	i.on	i.off	pen.on	pen.1	tot.1
2008/09	xls	405	0	3	CU	DB	3	CX	DE	–	G64	J45
2009/10	xls	370	0	3	BH	BL	4	BH	BL	–	G64	J45
2010/11	xls	371	0	3	BH	BL	4	BH	BL	–	G64	J45
2011/12	xls	371	0	3	BH	BL	4	BH	BL	–	G64	J45
2012/13	xls	371	12	3	BH	BL	4	BH	BL	–	G65	J46
2013/14	xls	371	12	3	BH	BL	4	BH	BL	–	G65	J46
2014/15	xls	371	12	3	BE	BI	3	BE	BI	–	I68	L49
2015/16	xlsx	444	8	3	CU	DB	3	CX	DE	FX	H67	K48
2016/17	xlsx	446	8	3	CU	DB	3	CX	DE	FX	H67	K48
2017/18	xlsx	445	8	3	CU	DB	3	CX	DE	FX	H67	K48

- *year*—period covered in report
- *link*—link to data file
- *rows*—number of local authorities
- *first*—first row of data on sheets 3,4 and 5
- *e.sh*—which sheet are expenditures on
- *e.on*—which column on street expenditures
- *e.off*—which column are off street expenditures
- *i.sh*—which sheet are incomes on
- *i.on*—which column on street incomes
- *i.off*—which column are off street incomes
- *pen.sh*—which sheet are penalty charge incomes on
- *pen.on*—which column are penalty charge incomes
- *pen.1*—which cell is the Penalty charge notice income for on street parking data on in sheet 2
- *tot.1*—which cell is the Net current expenditures for Total transport and Highways services on in sheet 2