VISUALIZING SOCIETY
MAKING DATA GRAPHICS

Bikes & Pencils

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pcArea	stations	time	weekday		weekend	
			avgBikes	avgDocks	avgBikes	avgDocks
E	107	07:00	18.2	10.2	15.9	12.4
E	107	10:00	12.4	15.9	17.2	11.2
E	107	15:00	12.5	15.8	18.1	10.3
E	107	18:00	12.9	15.5	15.2	13.2
EC	62	07:00	6.5	19.0	7.3	18.0
EC	62	10:00	17.8	7.6	8.0	17.4
EC	62	15:00	16.8	8.6	7.9	17.6
EC	62	18:00	18.8	6.7	12.5	13.0
N	54	07:00	15.7	9.9	15.6	10.1
N	54	10:00	9.7	15.8	14.7	11.0
N	54	15:00	12.7	12.8	12.5	13.1
N	54	18:00	12.8	12.7	13.2	12.6
NW	41	07:00	18.7	73.0	18.4	7.6
NW	41	10:00	10.2	15.8	18.7	7.3
NW	41	15:00	11.1	14.9	12.2	13.8
NW	41	18:00	12.7	13.3	9.9	16.1
SE	64	07:00	17.5	8.8	19.4	6.9
SE	64	10:00	13.7	12.6	18.3	8.0
SE	64	15:00	13.7	12.6	17.1	9.2
SE	64	18:00	18.1	8.2	17.9	8.4
SW	113	07:00	11.7	11.8	11.9	11.7
SW	113	10:00	12.9	10.6	11.8	11.7
SW	113	15:00	12.9	10.6	11.4	12.2
SW	113	18:00	11.7	11.8	11.3	12.3
W	120	07:00	8.4	14.7	8.9	14.2
W	120	10:00	14.2	8.9	9.1	14.0
W	120	15:00	14.4	8.7	9.3	13.8
W	120	18:00	9.3	13.8	9.6	13.5
WC	62	07:00	6.4	18.6	7.2	17.8
WC	62	10:00	16.2	8.8	7.5	17.5
WC	62	15:00	16.5	8.5	9.2	15.8
WC	62	18:00	18.2	6.8	14.1	10.9

Data : Records *(rows)*

an area at a time of day AGGREGATED

Data : Channels *(columns)*

pcArea - Postcode Area *category*

Number of **stations** *number*

time of Day *number*

avgBikes - Average Bikes *number*

avgDocks - Average Docks *number*

SKETCH! OBJECTIVES

1. Show the data … or aspects of the data
   > *apply a visualization language*
   > *represent variation in quantities and qualities*
2. Compare different pieces of data … what looks interesting?
3. Explore and hypothesize … what is going on?
4. Annotate … use words and numbers (and graphics) to describe

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SKETCH! PROCESS

1. Find a **FRIEND**   – *work in groups of two!*
2. Find a **TABLE**   – *use the whole classroom*
3. Take an **A3** sheet each   – *two pieces of paper per group*
4. Take some coloured **PENCILS**   – *sharpen them return them later*

   5 mins - 11:10

5. Work out which records & **DATA** channels to show   5 mins - 11:15
6. Sketch / draft your **LAYOUT** & encodings   10 mins - 11:25
7. Sketch your data **GRAPHIC** on the back of the A3   30 mins - 11:55

STRATEGIES

EXPLORE …
what is interesting?

SELECT …
a data subset?

COMMUNICATE …
trends?
differences?

COMPARE …
times?
days?
types of days?
stations?
areas / regions?