

How DC Thomson use data journalism to track the vitality of city centres

Lesley-Anne Kelly, Head of Data Journalism



October 2024

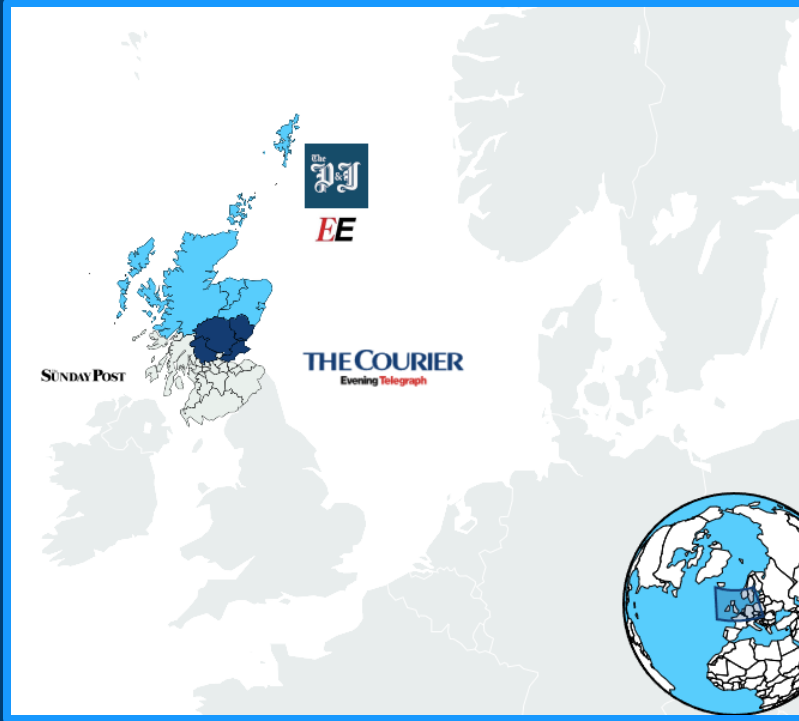
Background

About me

- Lesley-Anne Kelly, Head of Data Journalism at DC Thomson
- Working in data journalism for seven years
- Leading the data unit for three of those years



DC Thomson



- A family-owned business, we are headquartered in Scotland, with a presence in London and across the globe.
- Two of our titles, The Press and Journal and The Courier are two of the top three selling regional daily newspapers in the UK.
- Our news brands are part of the trading side of DC Thomson, which also includes, magazines, radio, a thriving genealogy community and a technology solutions business.
- As well as trading, DC Thomson also has a private investment business and The Northwood Charitable Trust was set up by the Thomson family in 1972 with the purpose of making communities in and around Dundee more supportive places for people to live, work and prosper.

The project

How healthy are our high streets?

Our high streets are suffering – between cost-of-living issues, the lasting effects of the pandemic, and the prevalence of online shopping, vacant units are a constant in our city centres

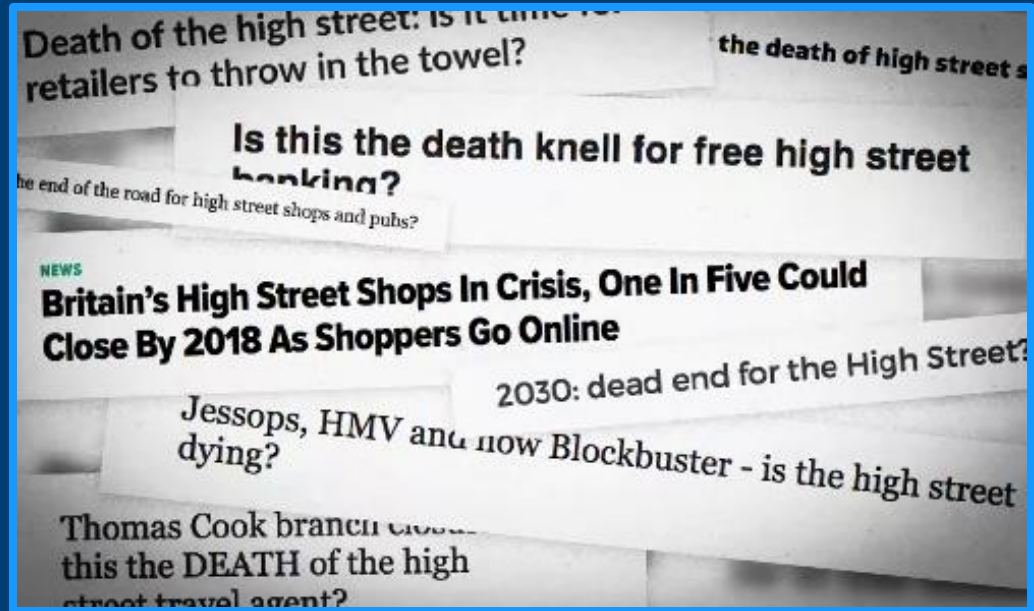
We wanted to be able to quantify the issue and to see if the issue is getting better or worse

Unfortunately, no data existed...



We wanted to provide clarity by quantifying the issue

- There's a lot of "death of the high street" discourse – what does the data say?
- More than just vacant/occupied – we wanted to see what kind of businesses make up our high streets



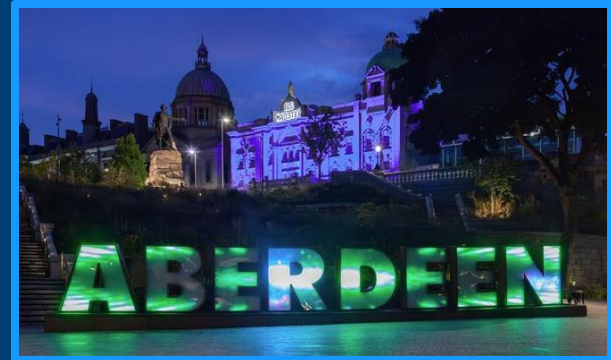
We wanted to create data that drives change

- We live in the cities we report on and want to see them succeed
- By providing this data and reporting on it – could we impact positive change in our communities?



This is more than just news... it's our home

- We don't just want to report, we want to shine a light on the things that matter the most to our communities – and our high streets are at the heart of our communities



We wanted to create a tool for reporters

- Our reporters are writing about our high streets every day – we wanted to build something that would give them additional context for their stories
- Instead of saying a shop or restaurant has opened or closed, could we build a tool that would allow them to also talk about trends?



What we did

Internal data

- As well as the articles for readers we have exclusive data available internally for reporters

High Street Tracker Dundee

Data for reporters

The data below is available to reporters to use in any coverage of the comings and goings of the Dundee high street and shopping centres. All of the data is manually collated and we're relying on reporters to keep us in the loop regarding changes. If you are reporting on any relevant openings or closings (or just spot something on your lunch break) please either tag LAK and Emma when posting the link in the newsroom chat, drop us a message or email databeam@dctmedia.co.uk 📧

When referring to any of this data please say "according to data from the Courier high street tracker" and link back to our tracker articles which are linked below:

High streets [Dundee city centre: Track the empty and occupied units](#)

Shopping centres [Dundee shopping centres: Track the empty and occupied units](#)

Jump to section

[How many \(and what proportion of\) high street units are vacant?](#)

[How many \(and what proportion of\) shopping centre units are vacant?](#)

[What kind of units are on each street?](#)

[What is the breakdown of unit types on each street?](#)

[What kind of units are on each centre?](#)

[What is the breakdown of unit types in each centre?](#)

Tracker quick links

[Aberdeen high street tracker](#)

[Dundee high street tracker](#)

[Perth high street tracker](#)

[Inverness high street tracker](#)

How many (and what proportion of) high street units are vacant?

Street	Vacant	Occupied	Total units	% vacant
Castle Street	5	14	19	26.3%
Commercial Street	13	39	52	33.3%
Crichton Street	4	10	14	28.6%
Exchange Street	2	13	15	13.3%
High Street (including City Square)	5	22	27	18.5%
Murraygate	8	26	34	23.5%
Wellmergate	7	60	67	12.3%
Perth Road	7	77	84	8.3%
Reform Street	9	25	34	26.5%
Union Street	1	25	26	3.8%
Whitehall Street	3	10	13	23.1%
Average	64	298	362	17.7%

How many (and what proportion of) shopping centre units are vacant?

Centre	Vacant	Occupied	Total units	% vacant
Overgate	10	66	76	13.2%
Wellgate	23	29	52	44.2%
Average	33	95	128	25.8%

What are the oldest empty units that we're aware of?

Dates are sourced from our own reporting, the businesses social media/websites, google street view, companies house etc and the high street/shopping centre tracker for a fuller explanation

High Streets

Rank	Last business in this unit	Street	Days vacant	Which is roughly X years
1	Victoria Wine	Reform Street	5290	14.5
2	The Anglers Creel	Exchange Street	4523	12.4
3	Toymaster	Commercial Street	2211	6.1
4	Hynds Amusement Arcade	Reform Street	2190	6.0
5	Amplifon	Reform Street	1966	5.4
6	Cooper and McKenzie	Reform Street	1936	5.3
7	Antalia	Crichton Street	1907	5.2
8	Never occupied (unit in Sainsbury's)	Perth Road	1669	4.6
9	Tesco Metro	Murraygate	1661	4.6
10	Giza	High Street (including City Square)	1632	4.5

Adding more context to the data

High street master tracker

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High Street Trackers: At a glance

High Street vacancy

City	Street	Vacant	Occupied	Total units	% vacant
Aberdeen	Back Wynd	2	10	12	16.7%
Aberdeen	Belmont Street	8	22	30	26.7%
Aberdeen	Chapel Street	5	15	20	25.0%
Aberdeen	Gaeltic Lane	1	1	2	50.0%
Aberdeen	George Street	18	75	93	19.4%
Aberdeen	Little Belmont Street	8	8	16	50.0%
Aberdeen	Schoonhill	10	12	22	45.5%
Aberdeen	Thistle Street	2	25	27	7.4%
Aberdeen	Union Street	37	168	205	18.1%
Aberdeen	Upperparkgate	1	11	12	8.3%
Aberdeen	Grand total	64	337	401	20.0%
Dundee	Castle Street	5	14	19	26.3%
Dundee	Commercial Street	13	26	39	33.3%
Dundee	Crichton Street	4	10	14	28.6%
Dundee	Exchange Street	2	13	15	13.3%
Dundee	High Street (including City Sq)	5	22	27	18.5%
Dundee	Murraygate	8	26	34	23.5%
Dundee	Nethergate	7	50	57	12.3%
Dundee	Perth Road	7	77	84	8.3%
Dundee	Rafens Street	9	25	34	26.5%
Dundee	Union Street	1	25	26	3.8%
Dundee	Whithall Street	3	10	13	23.1%
Dundee	Grand total	64	298	362	17.7%
Perth	George Street	4	34	38	10.5%
Perth	High Street	22	83	115	19.1%
Perth	King Edward Street	1	4	5	20.0%
Perth	St John's Place	4	2	6	66.7%
Perth	Scott Street	7	38	45	15.6%
Perth	South Methven Street	11	35	47	23.4%
Perth	South Street	16	76	92	17.4%
Perth	St John Street	5	20	25	20.0%
Perth	St John's Place	9	9	18	50.0%
Perth	Grand total	68	297	365	18.6%

Shopping centre vacancy

City	Centre	Vacant	Occupied	Total units	% vacant
Aberdeen	Ben Accord	15	40	55	27.3%
Aberdeen	St Nicholas	2	17	19	10.5%
Aberdeen	Trinity Centre	8	20	28	28.6%
Aberdeen	Union Square	4	82	86	4.7%
Aberdeen	Total	29	159	188	15.3%
Dundee	Overgate	15	66	81	18.5%
Dundee	Wallgate	23	29	52	44.2%
Dundee	Average	33	95	128	25.8%
Perth	St John's	7	29	36	19.4%
Inverness	Eastgate	16	58	74	21.6%
Coastal country	Grand total	40	134	174	24.0%
P&J	Grand total	45	217	263	17.1%
Total	Grand total	85	341	427	19.9%

High street master tracker

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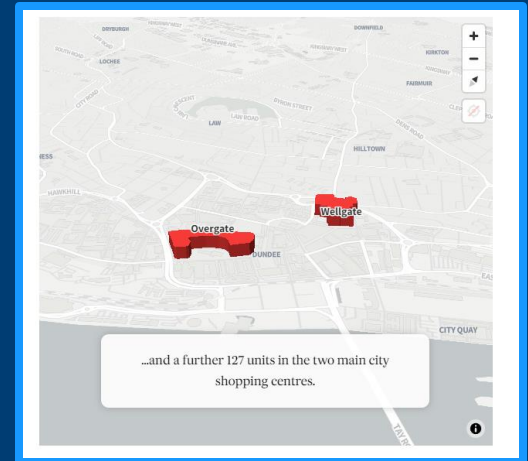
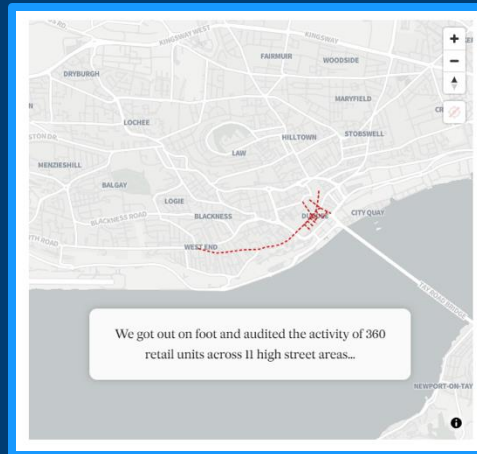
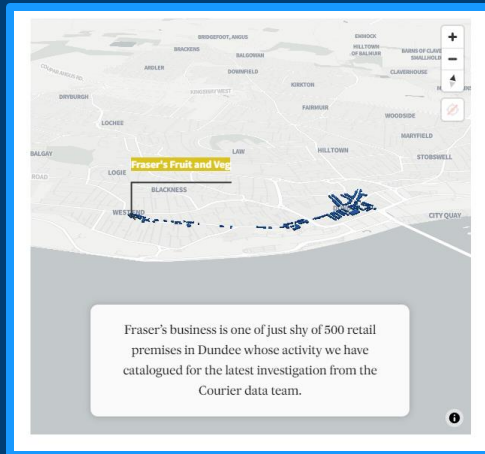
High Street trackers monthly data

		June 2023	July 2023	August 2023	September 2023	October 2023	November 2023	December 2023	January 2024	February 2024	March 2024
5	City										
6	Aberdeen street total	16.67%	16.7%	16.7%	16.7%	16.7%	16.7%	20.4%	20.6%	19.70%	19.48%
7	Dundee street total	15.0%	15.5%	15.5%	15.5%	17.5%	17.2%	17.2%	17.70%	18.2%	18.8%
8	Perth street total							16.39%	16.67%	16.67%	18.85%
9	Inverness street total							10.70%	9.9%	9.9%	9.9%
12	City										
13	Aberdeen	Back Wynd	16.67%	16.7%	16.7%	16.7%	16.7%	16.7%	16.7%	16.7%	16.7%
14	Aberdeen	Belmont Street	23.33%	26.7%	25.0%	22.6%	25.0%	29.0%	29.0%	25.0%	26.7%
15	Aberdeen	Chapel Street	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%	25.0%
16	Aberdeen	Gaeltic Lane	50.0%	50.0%	50.0%	100.0%	100.0%	50.0%	50.0%	50.0%	50.0%
17	Aberdeen	George Street	17.20%	17.2%	17.2%	17.2%	17.2%	17.2%	17.2%	17.2%	17.2%
18	Aberdeen	Little Belmont Street	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
19	Aberdeen	Schoonhill	36.36%	36.4%	40.9%	40.9%	40.9%	40.9%	40.9%	40.9%	40.9%
20	Aberdeen	Thistle Street	11.11%	11.1%	11.1%	11.1%	14.8%	14.8%	14.8%	14.8%	7.4%
21	Aberdeen	Union Street	22.16%	21.6%	20.5%	20.5%	20.5%	20.5%	20.5%	21.0%	20.0%
22	Aberdeen	Upperparkgate	16.67%	8.3%	4.3%	4.3%	6.3%	6.3%	6.3%	6.3%	6.3%
23	Dundee	Castle Street	36.8%	36.8%	42.1%	42.1%	36.8%	36.8%	36.8%	36.8%	26.3%
24	Dundee	Commercial Street	26.3%	26.3%	26.3%	26.3%	28.9%	28.9%	28.9%	31.6%	35.9%
25	Dundee	Crichton Street	6.7%	6.7%	6.7%	6.7%	21.4%	21.4%	21.4%	21.4%	28.6%
26	Dundee	Exchange Street	13.3%	13.3%	13.3%	13.3%	20.0%	20.0%	20.0%	20.0%	13.3%
27	Dundee	High Street (including City Square)	11.1%	11.1%	11.1%	11.1%	14.8%	14.8%	14.8%	18.5%	18.5%
28	Dundee	Murraygate	24.2%	27.3%	27.3%	27.3%	23.5%	23.5%	26.5%	26.5%	23.5%

How we did it

Engagement

- Engaged with local reporters on which streets/shopping centres were the “key indicator” areas for each patch
- The wisdom of the crowd is integral to keeping the data up to date so getting newsroom buy in was key



A virtual stroll down the high street

- Once we identified the streets to track we used google maps street view to start drawing out the units
- Each individual retail unit was hand drawn



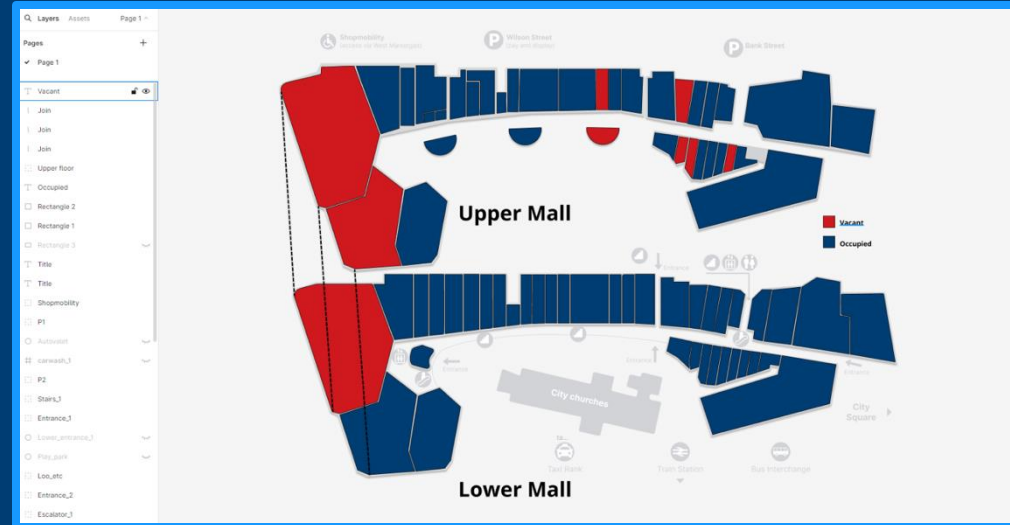
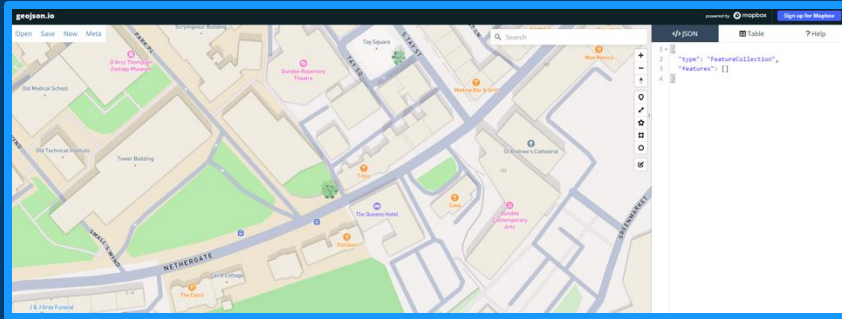
An actual stroll down the high street

- From google maps and our own knowledge we made lists of what we believed to be in each unit
- We then walked down each street to create the final version of the lists/maps for each street/shopping centre
- Each unit was also categorised and subcategorised
- Maps were hand drawn using Geojson.io and the entire project runs off Google Sheets
- Updated whenever new data is available
- Quality assured every quarter



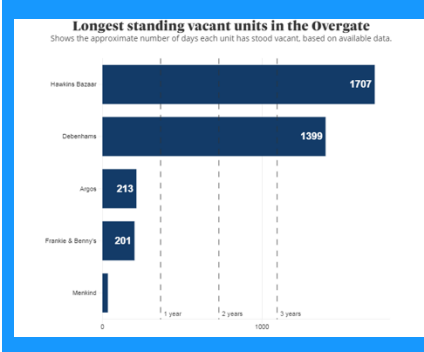
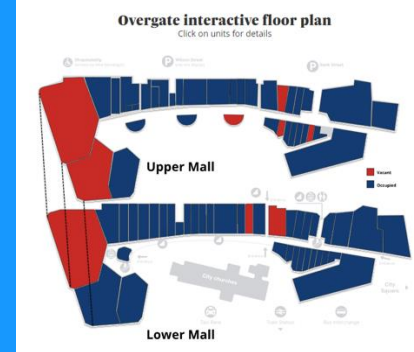
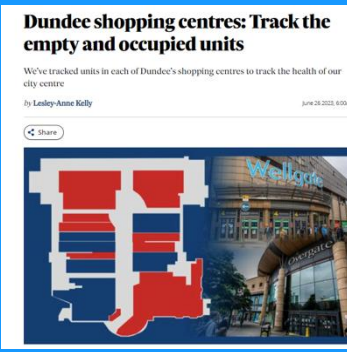
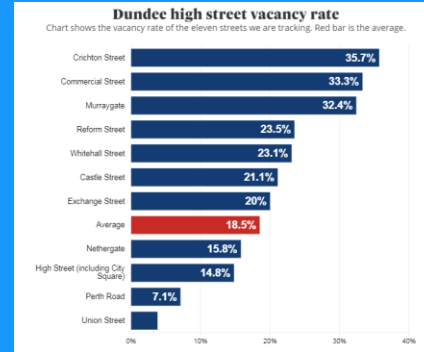
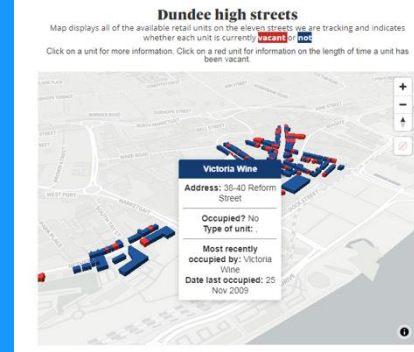
Technical details

- Geojson.io used for hand drawing every unit
- Figma used to create floor plans of every shopping centre
- QGIS used for any more advanced spatial analysis
- All charts and maps use Flourish which are hooked up to the entire dataset via google sheets – every change involves a small update to the Google Sheet, which then triggers off several bits of analysis and sends straight to Flourish



The structure

- Each city has a tracker article looking at the high streets and shopping centre
- Each city gets a “launch article” where take a deep dive into the data we’ve gathered and interview local business owners – utilising data visualisation and scrollytelling
- Each quarter we get back out on foot and quality assure the data and publish a fresh deep dive



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“You had the last jar”, Fraser responds, to the customer that has suddenly appeared around the door to the back room of his shop.

“But I’ll phone them and get it in, don’t worry.”

“What a guy”, the customer replies.

It’s 11:42am on a Monday and there are six customers queuing in Fraser’s small shop. His business is clearly thriving.

Fraser Reid is the owner of Fraser’s Fruit and Veg.



Building on the data

- From the initial bank of data we slowly added additional bespoke analysis – all with the core spine of the exclusive high street data running through it

Who owns Dundee's top 18 vacant high street units?

Who owns the longest standing vacant properties on Dundee's high streets? We purchased property deeds for 18 units which have been empty for at least three years. [Emma Sabljak](#)



March 25, 2024, 6:00am

Share



We investigate who owns the high street vacant units that have been empty the longest.

'Progressive and friendly or dirty and sad': Your views on shopping in Dundee city centre

Depressing, sad and dirty?

Asked what one word they would use to describe Dundee's city centre, **negative** sentiments overwhelmed the **positive**

The bigger the word, the more times it was used in our survey



Source: The Courier Dundee Matters survey - 539 people participated - 468 responses analysed
Words in black were not found in the sentiment analysis lexicon

Dundee Matters: How does the city centre compare to others across Scotland

Is there a business that thrives on Dundee high streets? Are there shops that soar in other cities but fail in the City of Discovery? [Emma Sabljak](#)



March 1, 2024, 6:00am

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How independent are Aberdeen's high streets?

Using our high street trackers, we've analysed the number of businesses on each street and in the shopping centres to find out how many are independent. [Emma Morrice](#)



September 2, 2024, 6:00am

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Comment 0



Aberdeen is home to a number of unique independent businesses. Image by Scott Baxter / DC Thomson

How has Union Street changed over the past decade?

We've compared Aberdeen's Union Street in 2013 to 2024 to see how things have changed over the years. [Emma Morrice](#)



September 23, 2024, 6:00am

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Comment 6



Union Street in 2013. Image by Kath Flannery / DC Thomson.

Bringing the data to life

High Street Summit: How Dundee city centre can shake-off its negative image and warnings over 'toxic nostalgia'

An expert panel discussed how Dundee's centre can improve at The Courier's High Street Summit.

by Paul Malik

May 6 2024, 5:55am

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Comment 9



The Courier's High Street Summit event featured The Courier editor David Clegg, Matt Colledge of Altrincham Forward, Dundee City Council leader John Alexander, Ron Smith of Glamis Investments, urban planning expert Dr Husam Alwaer and Dundee and Angus Chamber of Commerce president Kelly-Anne Fairweather. Image: Mhairi Edwards/DC Thomson

THE COURIER

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Who did it

Local reporters in Inverness



The data journalism team

Audience teams – SEO specialists/social media etc

Reporters across the newsroom

Insight specialists

Results

Driving change in our communities

Council leader pledges £200,000 to clean up Dundee city centre following Courier campaign

Council leader John Alexander has committed to adding more environmental service staff and bringing in external cleaning experts to make city centre more attractive.

by Paul Malik

May 6 2024, 5:55am

Share Comment 21



Leader of Dundee City Council John Alexander on the High Street summit panel. Image: Mhairi Edwards/DC Thomson.

An additional £200,000 is to be spent cleaning up the city centre, following revelations brought about by The Courier's Dundee Matters campaign.

The extra money will go toward hiring more environmental services staff as well as bringing in private contractors to deep clean the city centre.

Council administration leader John Alexander committed to the funding at The Courier's High Street Summit at Meadowside.

We created a powerful storytelling tool

Who owns Dundee's top 18 vacant high street units?

Who owns the longest standing vacant properties on Dundee's high streets? We purchased property deeds for 18 units which have been empty for at least three years. [Ema Sabljak](#)



March 23, 2024, 6:00am

Share

Dundee Matters: How does the city centre compare to others across Scotland

Is there a business that thrives on Dundee high streets? Are there shops that soar in other cities but fail in the City of Discovery?

By Ema Sabljak



P&J INVESTIGATIONS

Aberdeen city centre: A ghost town or winning the battle for survival?

June 26, 2023



ABERDEEN & ABERDEENSHIRE

How has Union Street changed over the past decade?

September 23, 2024

6

Dundee city centre: One year of tracking retail vacancy rates

It's now been one year since we started tracking the vacancy rates of Dundee city centre - what has changed in that time?



By Lesley-Anne Kelly



How have the high streets and shopping centres changed in Dundee? Graphic by Michael McCosh.

How independent are Aberdeen's high streets?

Using our high street trackers, we've analysed the number of businesses on each street and in the shopping centres to find out how many are independent. [Emma](#)

Morrice



September 2, 2024, 6:00 am

We created a powerful storytelling tool

Data from The Courier shows Commercial Street has the second-highest vacancy rate of the main streets in Dundee city centre.

More than a quarter of units are empty.

The average across the city is 15%.

More than half of the shops on Dundee's pedestrianised Union Street are food and drink outlets, according to [The Courier's High Street Tracker](#).

Bubblicious is the new kid on the block, filling the unfilled unit previously occupied by toy shop Bears and Buddies Workshop.

Its move into the centre would fill one of the few empty spaces in the Overgate.

According to [The Courier's shopping centre tracker](#), the Paperchase unit and Debenhams are the only empty shops on the ground floor.

A recent Press and Journal investigation found that Belmont is one of the top streets in Aberdeen for independent businesses.

The cobbled area has 18 units occupied by independent traders and five which are chains – meaning 78% of Belmont Street is locally operated.

At one time, The Press and Journal high street tracker showed a fully occupied Little Belmont Street.

Along with the Little Belmont Hut closing down earlier this year, the loss of Tango Turtle would mean two out of seven units are vacant – equal to 28.5%.

If the restaurant has closed for good, it would be yet another blow to the Granite City's food scene.



Recognised by the
World Association of News Publishers, WAN-IFRA



Key success factors

Communication

- Reporters were key to this project, getting them on board was essential to success
- We tapped into the knowledge of our readers with forms on every article



Exclusivity

- None of this data is available in anything close to this level of detail anywhere else



Evergreen content benefits

- The tracker articles are clicked on every day and updated regularly which Google rewards with good search authority
- When our reporters link to those trackers they're able to benefit from that SEO authority for their news articles



Main challenges

Communication

- With so many moving parts in a newsroom it took a while to integrate use of the data into daily practice for reporters



Resources

- While maintenance now is manageable, the up front time investment in building the data was high
- The idea for this was first pitched in December 2022. Work began seriously around February/March 2023 and was first published in June 2023.



Key learnings

Process

- When you define the data – YOU define the data
- The initial two cities were built in parallel by two people. Whilst 99% of the process was the same small differences in problem solving approaches had to be tweaked post-launch

geometry	Name	Occupie	Vacant?	Address	Category	Subcategory	Date	Days vacant	Street
("coordinates": [2, 9948, 56, 456])	The Rosebud	Yes		209 Perth Road	Shopping	Florist			Perth Road
("coordinates": [2, 994685, 56, 4])	Colin Lowe Pharmacy	Yes		205 Perth Road	Health and Wellbeing	Pharmacy			Perth Road
("coordinates": [2, 994517, 56, 4])	West End Butchers	Yes		195-197 Perth Road	Food and Drink	Butcher			Perth Road
("coordinates": [2, 994228, 56, 4])	Perth Road Laundrette	Yes		191 Perth Road	Services	Laundrette			Perth Road
("coordinates": [2, 99406, 56, 45])	Diabetes Aide	Yes		189 Perth Road	Shopping	Charity shop			Perth Road
("coordinates": [2, 994916, 56, 4])	Pure Beauty	Yes		318 Perth Road	Hair and Beauty	Beauty/nail salon			Perth Road
("coordinates": [2, 994754, 56, 4])	British Red Cross	Yes		314 Perth Road	Shopping	Charity shop			Perth Road
("coordinates": [2, 994631, 56, 4])	The Jungle Collective Barber	Yes		319 Perth Road	Hair and Beauty	Barber			Perth Road
("coordinates": [2, 994506, 56, 4])	Spar	Yes		306 Perth Road	Shopping	Convenience store			Perth Road
("coordinates": [2, 994303, 56, 4])	Mas	Yes		304 Perth Road	Food and Drink	Restaurant/cafe			Perth Road
("coordinates": [2, 994189, 56, 4])	Pacamara	Yes		302 Perth Road	Food and Drink	Restaurant/cafe			Perth Road
("coordinates": [2, 993911, 56, 4])	Shax burgers	Yes		187 Perth Road	Food and Drink	Restaurant/cafe			Perth Road
("coordinates": [2, 993691, 56, 4])	Andrew Bolton Opticians	Yes		185A Perth Road	Health and Wellbeing	Optician			Perth Road
("coordinates": [2, 993593, 56, 4])	Tay Fry Inn	Yes		181-183 Perth Road	Food and Drink	Takeaway			Perth Road
("coordinates": [2, 993479, 56, 4])	Don Michele	Yes		177-179 Perth Road	Food and Drink	Restaurant/cafe			Perth Road
("coordinates": [2, 99339, 56, 45])	Bangkok Thai	No	Y	175 Perth Road	Food and Drink	Takeaway	18 Apr 2024	161	Perth Road
("coordinates": [2, 993281, 56, 4])	Super Snack	Yes		173 Perth Road	Food and Drink	Takeaway			Perth Road
("coordinates": [2, 993187, 56, 4])	Jaconelli 57	Yes		169 Perth Road	Hair and Beauty	Hairdresser			Perth Road
("coordinates": [2, 99306, 56, 45])	Speedwell bar	Yes		165-167 Perth Road	Food and Drink	Pub/bar			Perth Road
("coordinates": [2, 993925, 56, 4])	Fraser's Fruit and Veg	Yes		300A Perth Road	Shopping	Food shop/deli			Perth Road
("coordinates": [2, 993866, 56, 4])	Fisher and Donaldson	Yes		300 Perth Road	Shopping	Bakery			Perth Road
("coordinates": [2, 993763, 56, 4])	Master Tailors	Yes		298 Perth Road	Services	Other			Perth Road
("coordinates": [2, 993681, 56, 4])	Canton House	Yes		294 Perth Road	Food and Drink	Takeaway			Perth Road
("coordinates": [2, 993582, 56, 4])	The Barber Man Studio	Yes		292 Perth Road	Hair and Beauty	Barber			Perth Road

Next steps

Dundee

Aberdeen



Inverness

Perth

Thank you!

Appendix

Tools

- Flourish
- Figma
- QGIS
- Geojson.io
- Google Sheets

Links

- <https://www.thecourier.co.uk/tag/high-street-tracking/>
- <https://www.pressandjournal.co.uk/tag/high-street-tracking/>

Get in touch

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