

Perth City of Light Updated Information May 2023



Contents

Background and Context.....	3
Budgetary information.....	5
Economic Impact.....	7
Evaluation of Longer Term/permanent works.....	9
Reach, engagement, and impact of the Light Action Plan	14
Cost of running lighting.....	21
Summary of Benefits of the Project.....	23
Projects completed or in construction phase	27
Works Issued with expected completion in 2023/24	43
Design Briefs Still to be issued:	49
Appendix A: Riverside Lights 2018 Evaluation	56

Background and Context

In 2016 Perth and Kinross Council launched an ambitious vision for the City placing culture at the centre of economic redevelopment activity and making best use of new technologies in lighting to make visual and visitor experience improvements to the City whilst improving the sustainability of the lighting infrastructure.

The plan delivered conceptual designs and outline proposals to provide a consistent series of lighting initiatives to create unique, vibrant, and attractive evening scene to aid in delivering Perth's ambition to become a leading European small city. In addition to delivering an enhanced residential and visitor experience the proposals are designed to help deliver a more sustainable and connected Perth.

Lighting can be crucial to support a transition from functional interventions focused on public safety, such as temporary wider walkways and bike lanes, into something that is part of a longer-term recovery plan that supports the night-time economies by unlocking outdoor social spaces for night-time use and events, improving night-time journeys, etc.

Lighting can play a pivotal role in revitalising high streets and town centers by enhancing the attractiveness of the environment, improving perceptions of safety, and ultimately increasing footfall, dwell time and spend.

Lighting interventions can quickly create performance space, for community and professional use; facilitating the human connections that build community resilience. In the long term, they can develop through considered design into permanent facilities promoting sustained economic and social benefits in the daytime and after dusk.

As well as installing feature and architectural lighting which have to date illuminated the likes of Perth Bridge and St Pauls Square within the lighting plan the use of forms of lighting or lighting structures to create cultural attractions that aim to stimulate, raise social interaction and activity are a core delivery requirement.

To that end the plan was further developed with a view to create a permanent night-time light art trail making Perth the first UK city to have this as a cultural attraction.

Light Festivals and shows are incredibly popular, seen not only by the delivery of our own Norie Miller Light Nights but the likes of the Enchanted Forest in Pitlochry, Spectra in Aberdeen, Lumiere in Durham & London, Light Up the Northeast etc where visitor numbers and desire to attend are always incredibly high and prove hugely popular and increase visitor spend to the area.

They do however have large production costs and a limited period of time of impact whereas a permanent trail can be viewed year-round and create a visitor draw; with some installations also being effective during the day.

In order to create a permanent light trail, in 2019 the first of a series of proposed light art installations was installed in Mill Street Perth. Further proposed commissions were subsequently delayed due to the pandemic however the second installation was completed in October 2022 with one further commission is due for installation April 2023 and two further installations programmed and commissioned for later in 2023.

Other works in progress (outwith cultural lighting commissions) include Lower City Mills, Skinnergate, South Inch, Perth Theatre, Perth Art Gallery (building lighting) & Perth Museum.

Notes

£500k was vired in 2018 from the original £5m Light Action Plan budget directly to Property to meet the costs of external lighting of the new Perth Museum and surrounding public realm for that project. £65k was also vired to Property to support wider works to the regeneration of St. Pauls Square in 2018 leaving a total budget of £4.435m.

The Officer involved in the programme took over the Creative Exchange project in Feb 2019 to see it through to its completion and official opening in Feb 2020 and as such was unable to deliver the full expected level of works within City of Light Action Plan that year.

Similarly, having been re-tasked in April 2020 for the authorities Covid 19 resilience in PPE and Foodhub Operations and then finally the delivery of the Perth Vaccination Clinic in Bells Sports Center the officer was effectively, for a period of two years, focused on the operations and only able to pick up occasional work from the project(s) - As well as being periods on inactively from contractors' ability to work due to covid regulations and illness.

As a result of above works are considered to be around 1.5/2 years behind the initial target for full completion of the project however the bespoke Framework contract that was developed has allowed the flexibility of timeline around progressing certain schemes at certain times in order to deal with the likes of planning consents and establishing agreements with Stakeholders such as Structures, Greenspace, Street Lighting, 3rd Party organisations, public and private building owners and as such has enabled space and time naturally within the contract to deal with the unforeseen events around the Pandemic.

Budgetary information

As shown in the table below, the costs of works for the Lighting Action Plan carried out to 31st March 2023 and budgets committed to St Paul's and the Perth Museum project, total £3.253m of the £5m budget, leaving a total budget for future works of £1.747m. Contracted works to the value of £0.963m are planned for financial year 23/24 which leaves £0.784m of budget for future planned works which have at this time not been legally committed.

The budget reported to the Finance & Resources Committee on 26th April 2023 (Report No. 23/121) for 22/23 through to 24/25 totalled £2.752m (22/23 £0.875m, 23/24 £1.200m and 24/25 £0.677m). The final outturn for project costs for 22/23 was £1.005m (unaudited) leaving a total budget for 23/24 and 24/25 of £1.747m.

	Costs of works to 31.3.2023	Contracted works/In progress	Works/Costs not committed	Totals
Perth Bridge	£337,000			£337,000
Queens Bridge		£70,000		£70,000
Norie Miller	£347,000			£347,000
St. Matthews	£61,000			£61,000
Lower City Mills (city centre)	£16,000	£134,000		£150,000
Perth Art Gallery	£15,000	£125,000		£140,000
Perth Theatre	£5,000	£116,000		£121,000
Perth Concert Hall (city centre)	£99,000	£41,000		£140,000
Sherriff Court	£42,000			£42,000
St. Pauls	£166,000			£166,000
Library	£72,000			£72,000
St Johns Kirk			£120,000	£120,000
Aberfeldy/Pitlochry	£72,000	£12,000		£84,000
Gateways (x3)			£450,000	£450,000
Fergusson Gallery (city centre)	£155,000			£155,000
Winter Animals (city centre)	£115,000	£35,000		£150,000
North Inch (City Centre)	£85,000			£85,000
South Inch (city centre)	£127,000	£83,000		£210,000
Mill street - Projection Installation	£100,000			£100,000
Guard Vennel (vennels)	£78,000	£50,000		£128,000
Cutlog Vennel - Nathan Coley (vennels)	£120,000			£120,000
Skinnergate (vennels)	£35,000	£45,000		£80,000
High Street Columns (city centre)	£37,000	£120,000		£157,000
Vennels - Kirk Close/Watergate/Oliphants/Baxter's etc	£50,000	£43,500	£129,000	£222,500
Various City Centre interventions/Design fees/equipment etc	£223,000			£223,000
Wellmeadow/Scone	£14,000			£14,000
High Street Perthshire Women Mural		£8,500		£8,500

Maintenance Stock Inventory	£50,000			£50,000
Maintenance of Assets/Lighting			£85,000	£85,000
3rd Party Design Fees/Reports	£28,000			£28,000
Project Support Costs	£239,000	£80,000		£319,000
SUBTOTAL	£2,688,000	£963,000	£784,000	£4,435,000
Perth Museum (Budget transferred to overall project)	£500,000			£500,000
St Pauls Sq. (Budget transferred to overall project)	£65,000			£65,000
TOTALS	£3,253,000	£963,000	£784,000	£5,000,000

Projects completed or in construction phase are:

Perth Bridge – Completed July 2019
Norie Miller/Rodney Parks – Completed Nov 2019
Meander Light Art Installation – Completed Nov 2019
St Matthew’s Church – Completed June 2019
Aberfeldy Square – Completed March 2020
St Pauls Church – Completed June 2021
North Inch Lighting – Completed Nov 2020
Pitlochry & Aberfeldy War memorials - Completed Oct 2020
Various City Centre interventions/Design fees/equipment etc
Vennels - Kirk Close/Watergate/Oliphants/Baxter’s etc
Perth Sherriff Courthouse – Completed Apr 2022
Cutlog Vennel – Nathan Coley – Completed Oct 2022
Perth Concert Hall – Completed Dec 2022
Perth Library Stage 1 – Completed Dec 2022
Winter Animals year 1 – Completed Nov 2022
Fergusson Gallery – Completed Feb 2022
Guard Vennel – Completed April 2023
Skinnergate – Completed May 2023
South Inch – Due to be completed end May 2023

Works Issued with expected completion in 2023/24

Perth Art Gallery Light Commission & Building - Oct 2023/Jan 2024
Queens Bridge – Oct 2023
Aberfeldy Stage 2 - Aug 2023
High Street Columns Commission - Nov 2023
Perth Theatre - Aug 2023/Jan 2024
Winter Animals Year 2 – Nov 2023
Lower City Mills - 2024 (dependent on other building works)

Design/Work Briefs not issued:

Gateway Entries
St Johns Kirk
City Vennels (Kirk Close/Watergate/Oliphants/Baxter’s etc)
Maintenance of Lighting Assets

Economic Impact

As per the Impact Analysis April 2017 a clear approach to lighting is crucial to the performance of the city's evening economy, specifically its population-driven industries.

These industries mainly include consumer services businesses in the areas of retail, entertainment, hospitality, and tourism.

By encouraging an increased length of visit and by attracting more visitors to the city, the lighting strategy will contribute to businesses with an opportunity to capture a greater proportion of expenditure from a larger expenditure pool.

57% of residents surveyed in retail studies indicate they have never visited Perth City Centre after 6pm, this imbalance and underutilised resource is highlighted in additional expenditure of up to circa £140M that is currently being untapped from resident expenditure.

Lighting is also an area of intervention that provides cost-effective solutions that can ensure a quick win for authorities and developers looking to make improvements.

Over the years, more and more local governments have hosted light festivals to support the local economy, particularly during seasonal slumps and the winter periods, promoting the night-time economy on a temporary basis. These events are particularly relevant in towns with a developed or developing tourist industry. Evidence has shown light festivals are a cost-effective mechanism (relative to the return on investment) to attract significant increase in visitors, particularly out of town visitors, and increase revenue generated for local businesses.

Riverside Night Lights

As part of the plan for Perth a lighting event was held at Norie-Miller Park (now known as Perth Riverside Night Lights) in Perth over 18 nights through to February 14th, 2017, to provide both the public and visitors with an exciting example of future lighting projects for the city.

The event has been a major success with visitor numbers of over 51,000, far exceeding the original estimations. The event was repeated in 2018 over 19 nights with numbers more than 53,000 attending, and just under 60,000 in 2019 over a 16-night run cementing the event in Perth & Kinross Winter Festival Calendar.

It returned in 2020 just before the pandemic but running a shortened period of nine nights but still with numbers in excess of 4000 per night on average.

While the event is delivered through the Winter Festival programme the City of Light Action Plan has provided permanent lighting infrastructure throughout the park, with a view to making the area more attractive to visitors year-round and in the evening. In addition, the likes of projectors purchased through the project have been able to be used on site to provide more content and remove revenue pressures for delivery of the event.

In 2018 an evaluation of the event was undertaken looking at the economic impact from visitors to the lighting event for the local economy the evaluation of which is included as an appendix at the end of this report.

In summary the economic impact of Riverside Nights was estimated at £744,510.33 when transformed into net spending.

£356,566.05 was estimated to have been generated by visitors from non-Perth & Kinross Council post codes.

£387,944.28 was estimated to have been generated from visitors from within Perth & Kinross post codes.

Including the 1.25 sub-regional multiplier it was estimated the total net worth of the event to be £930,637.91.

Light Festivals General

Other lighting events around the UK and the world have similar levels of return from evaluation with their visitors.

Collated figures have demonstrated SPECTRA, Aberdeen's festival of light, which runs over 4 days had had over £700,000 impact to the local economy in 2017 with footfall levels increasing year on year before and after Covid restrictions.

Figures published by Aberdeen City Council demonstrate the value the event adds to the local economy. The 2017 event had an estimated output £685,872, which includes £403,454 of visitor spend and additional investment to the city as a result of the festival taking place. Over and above this figure an additional £314,453 was brought to the local economy through the spend by residents while attending the festival.

2022 and the post-pandemic restrictions saw Bristol host the return of the Bristol Light Festival and the highly anticipated return of the event had incredibly positive results.

The findings of an independent financial and visitor analysis report confirmed that the six-day event of stunning light installations attracted 170,000 visitors to the city and brought an additional spend of £3.4m into city centre businesses as a direct result of the event.

Durham Lumiere the best known of UK light events is always popular, the 2019 event - the 10th anniversary - saw the festival pass the one million visitor's mark. The 2019 exhibits received around 165,000 visitors, and 240,000 visitors went to see Durham Lumiere in 2017.

The evaluation of the 2018 festival demonstrated a significant boost to the economy, with a figure of £9.5m of economic benefits, according to the event organisers.

Copenhagen Light Festival is Europe's most popular an annual light festival that transforms the quiet and cold winter darkness into a unique celebration of light art, lighting design and illumination in the center of Copenhagen.

In three weeks of February the festival presents a wide range of light-based works – such as sculpture, installation, projection mapping, event and illumination created by both established and upcoming light artists, lighting designers, students and organizations and attracted over 500k visitors in 2021

What makes the Copenhagen festival different is that it already has a portfolio of permanent light and light art installations (around 25) which the light event utilises to builds upon to create the largest European Light event however the permanent installations provider that constant visitor attraction year on year and outwith the light festival period.

Evaluation of Longer Term/permanent works

An event/festival offers a unique way to engage with visitors and account for numbers.

It is obviously more difficult to gauge the impact of permanent installations in that they are not within the confines of a specific event space and outwith standard street counters we have no way to physically measure people's movements throughout the City Centre (although this is being investigated by using phone tracking via Bluetooth to show accurate evaluation).

There are also issues now with measuring year 'v' year movements due to two years of covid restrictions skewing figures with people unable to visit places, businesses being closed etc.

We can however look at the impact of longer-term installations carried out elsewhere prior to the pandemic to see how these drive footfall.

York

York took the decision in 2017 to expand their winter illumination so that they were in operation from early November to the end of February, extending the traditional Christmas lighting period by some 10 weeks to drive numbers to the city especially with a view to the evening economy and darker nights of winter.

This was hailed a resounding success and helped drive visits to the city during the off-peak tourism season. Visits to attractions and hotel occupancy levels were all up over the period and the lighting proved popular with both visitors and residents alike.

From November to December there was a 13.2% increase in rail journeys to the city (19 November – 23 December). At the same time footfall into the city was up by 1.3% year on year, bucking the national trend, and coach bookings were up by 8%.

Visits to attractions were 5% higher year on year with those attractions with Christmas events and exhibitions benefitting the most from these extra visitors.

York Business Improvement District (BID) and Make It York, the city's Destination Management

Sally Greenaway, Head of Visit York, a part of Make It York, said: "The winter months are a vital time of year for local businesses and the tourism industry, and we're delighted the winter lighting scheme has been so popular. Now that the festive season is behind us it is crucial York continues to attract visits during the traditionally quieter months and the Winter Lights scheme has added a new dimension, drawing in shoppers and visitors to enjoy the city lit up by night."

Copenhagen & Others

As mentioned previously Copenhagen hosts Europe's largest Light festival but this was created on the backdrop of other permanent installed works in the City, in total around 25 light art and public realm creative lighting initiative. Similar styles of delivery are found in San Francisco and London City.

<https://copenhagenlightfestival.org/permanent-installations/>

<https://www.sftravel.com/article/installations-see-illuminate-sf-light-art-trail>

<https://canarywharf.com/the-estate/art-culture/art-on-the-estate/>

Consideration in Perth

What this demonstrates is an appetite for visitors to not only attend light festivals but when a sufficient amount of permanent light art/creative light installations are delivered this creates a trail that is a year-round attraction, persuading desire to visit and to be around the installations in the evening – in our case the City Centre.

While some installations are complete (which have had significant coverage through media and socials individually) and would be considered marketable as ‘Creative Lighting’ schemes in those at Perth Bridge, St. Pauls & Fergusson Gallery, and ‘Light Art Installations’ in Cutlog vennel and Burts Close these alone would not be considered enough to market Perth with a ‘permanent light art trail’.

Until we have completed at least the four other installations that are currently underway and due for completion over the next 10 months in Guard vennel, High Street, the Art Gallery & Skinnergate it would be ineffectual to start marketing them as a whole offer.

Without around 10-12 pieces we would be selling short the unique offer of what we are now producing in the formation of the UKs only permanent City Centre Light Art Trail.

Additional Winter Lighting Offer

On top of the permanent installations and a cultural Light Art Trail the start of the formation of a ‘winter light trail’ around the City Centre with non-permanent pieces over the extended winter period was installed as part of the Winter festival offer near the end of November last year.

Winter Light trails are incredibly popular where they have been introduced, the likes of London, York, Bournemouth and indeed Perth Australia all have some sort of winter light trails.

The Christmas Lights Trail in Perth Australia which uses various light displays and projections, some of which are Christmas themed, are placed in and around the Perth central business district in Western Australia.

The event first occurred in 2017, in which there were 16 displays located around the city centre.

In 2019, there were 27 displays, including a new, smaller trail at Claisebrook Cove in East Perth. The event brought in approximately 333,000 visitors to the City of Perth.

In 2020, there was another new trail, this time in West Perth. There were 30 displays in total attracting nearly 400,000 people. It was recognised at the Western Australian Tourism Awards in 2021 where the 2020 event received gold in the Major Events and Festivals category.

Perth Wildlife Light Trail

The ‘Perth Wildlife Light Trail’ in Perth ran from November until late January & provided further enhancement and offer to the City Centre and again provides a different winter offer to other cities in Scotland.

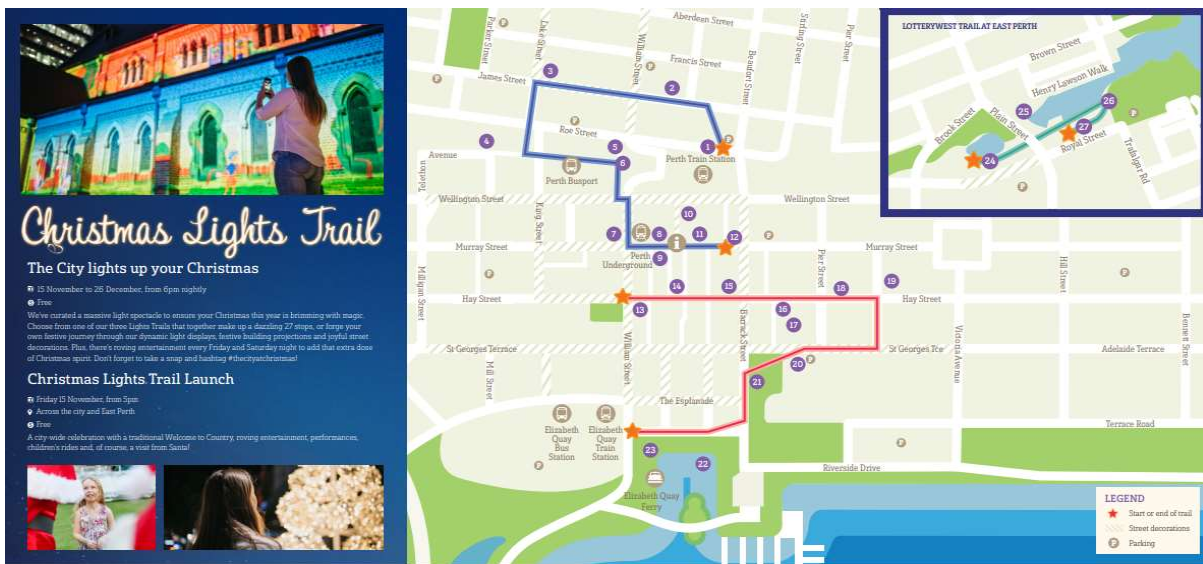
The bespoke designs were produced as a modern take on festive lighting and play on one of Perthshire biggest assets in wildlife consisting of a King Salmon, Stag, Otter, and Unicorn as the first part of this concept.

Owing to their being insufficient time prior to the delivery of the first four pieces last year to inspect the suitability of the manufactures work and tight time scale for the delivery we did not market the animals prior to their installation as we did not want risk the works either not landing in time or the works not being to the standard desired.

However, we can now be assured of the level of work and effect of the pieces as well as monitoring through socials the way they have been well received by the public and we can move forward to promotion of the pieces to a wider audience as part of the 23/24 Winter festival.

The plan is to introduce more installations year on year (The two pieces being designed for 23/24 are Osprey and Red Squirrel) to create a larger winter trail around the city centre businesses to increase footfall to locations and provide that differing offer to the likes of Edinburgh and Glasgow.

The actual light animals have already attracted interest in rental of pieces outwith the Perth Winter Festival period from operators owing to the 'non- Christmas' theme which allows lots of possibilities of use.



Something illuminating at every stop

- 1 REINDEER GREETINGS
Urban Orchard, Perth Cultural Centre
- 2 GINGERBREAD HOUSE
presented by Perth Cultural Centre
Perth Cultural Centre, James Street Mall
- 3 SANTA'S VINTAGE WHEELS
Northridge Plaza, Lake Street
- 4 CHRISTMAS COMBI
presented by Kings Square
Kings Square, Kings Street
- 5 LIFELINE CHRISTMAS TREE
Yagan Square, William Street Mall
- 6 CONSTELLATION TUNNEL
Yagan Square, William Street Mall
- 7 NEON NOEL
presented by Raine Square
Raine Square, corner William and Murray Street
- 8 JINGLE WALL
presented by 140
140, Railway Lane off Murray Street Mall
- 9 CITY OF PERTH CHRISTMAS TREE
Murray Street Mall
- 10 WISH UPON A STAR
Forrest Place
- 11 ROCKING HORSE
presented by Forrest Chase
Pudbury Walk, upstairs at Forrest Chase
- 12 FESTIVE FOX
Murray Street Mall
- 13 ANGEL WINGS
Hay Street Mall
- 14 LIGHT UP CHRISTMAS
Hay Street Mall
- 15 NUTCRACKERS
Hay Street Mall
- 16 LIBRARY LIGHTS
City of Perth Library, 573 Hay Street
- 17 CHRISTMAS PROJECTIONS
St George's Cathedral, Cathedral Square
- 18 SANTA'S THRONE
525 Hay Street, corner Pier Street
- 19 GIFTMAS
presented by Hibernian Place
Hibernian Place, 440 Hay Street
- 20 MOODIY YONGAS ('Solid Kangaroo')
Council House, 27 St George's Terrace
- 21 HOT AIR BALLOON
Stirling Gardens, corner Barrack Street and St George's Terrace
- 22 FRANCR
presented by Elizabeth Quay
Elizabeth Quay Hotel
- 23 FESTIVE PHOTO FRAMES
presented by Elizabeth Quay
Elizabeth Quay Water Park
- 24 CLAIRSBROOK CHRISTMAS TREE
Clairsbrook Lake, East Perth
- 25 ROYAL HORSE AND CARRIAGE
Clairsbrook Cove, East Perth
- 26 CHRISTMAS TRIKES
Clairsbrook Cove, East Perth
- 27 GIANT BAUBLE
Clairsbrook Cove, East Perth

Free three-hour parking and free Christmas cards

This festive season, we'd like to share in the gift-giving, by offering three hours of free parking to city visitors, on weekends and public holidays, starting 15 November.

This includes:

- Street parking along Hay and Murray Streets either side of the road from Wellington Street to Victoria Avenue
- City of Perth Parking (CPP) at Maguiness Cultural Centre and Pier Street carpark

Plus, get a free limited edition 50-pack gift card featuring artwork by WA artists when you park at one of the participating CPP or street carparks.

Look out for the inflatable reindeer at participating CPP carparks and check the street signs.

Head to visitperth.com.au for terms and conditions.

All your Christmases will come at once

SHOP, SPIN AND WIN WITH BURGO

- Friday (Saturday and Sunday) from 6 to 22 December, various times
- Various locations, see map for locations or follow @PerthBurgo on Instagram for details
- Spins 50¢ (the City can't offer a single spin except for the chance to spin the wheel and choose a prize) - John Burger Burgo. There's a range of prizes on offer including hotel stays, shopping vouchers and more. Terms and conditions apply.

SPEND \$50 AND GET A FREE BEACH TOWEL

- Selection available 27 December to 29 January (Friday Open to Royal, Saturday and Sunday) - Clats to Beach
- Selections available located in Hay and Murray Street Mall
- Spends \$50 on a single receipt and get a free beach towel with beach towel - see signs from a local WA and national retail store. Terms and conditions apply.

SUMMER BACKYARD

- Saturday and Sunday from 22 December to 29 January (Open to Open)
- Perth Place
- Perth Place
- Take a break from Christmas shopping and relax in the Summer Backyard by the Water Laboratory with art installations, gift wrapping workshops, a hot air balloon, live music and more. Presented by Perth Culture.
- Gift wrapping workshops and bag making until 22 December only.

Step 1: Snap yourself shopping Christmas in the city

Step 2: Upload a photo using #visitperthchristmas, #perthchristmas and #perthchristmas to the album to win the Perth Australia Day weekend experience at Ocean Plaza

Head to visitperth.com.au for terms and conditions.

Perth Australia Christmas Trail Map

Hospitality, Night-time businesses

There has been significant impact to the hospitality industry since February 2020 with the pandemic, the cost-of-living crises and rising energy costs.

Recent BBC analysis found in December 2022, 320 businesses in the food service industry – including restaurants, pubs, cafes, and catering firms, were forced to initiate corporate insolvency procedures. An increase of 41 per cent compared to the same month in 2019.

Across the sector, UK Hospitality figures suggest almost 5000 venues closed permanently last year – with three quarters of these failing in the last six months of 2022. That equates to a contraction of around 5 per cent. Around nine out of 10 are independent venues, and the current tight margins and economic situation means that multi-site operator or medium sized businesses can't take the sites over.

Following two years of Covid restrictions, the knock-on impacts of the war in Ukraine have been one crisis too many for an already beleaguered sector. Major hikes in food prices are just part of the cost-price inflation for the sector – currently running at 18 per cent, double what it was at the start of 2022, and forecast to rise to about 20 per cent by April. Energy prices also continue to rise with many businesses having seen fuel costs double or even triple.

The current crisis means that businesses would have to take 120 per cent of 2019 revenue just to stand still. Half of the sector is operating at or below break-even and a third have no reserves to rely on. Where businesses are not at breaking point, they are struggling to find staff and labour shortages in the sector are around 9 per cent. Footfall, meanwhile, is down due to pressures on household budgets – and with one in five people saying they plan to go out less to make ends meet, the outlook for 2023 is bleak.

While the lighting strategy for Perth is not something that can cure the problem it does go some way to trying to create an offer in the City Center in the evening which outwith The Concert Hall, Theatre, Cinema, restaurants, and bars there is little else to try and entice visitors to town out of 'high street' trading hours.

Even when the new museum is opened in 2024 it is unlikely to be open in the evening expect on specific exhibitions launches. It is therefore vital that Perth attempts to find offers that do not exist elsewhere and the lighting strategy is one of those areas that can provide that.

Post Pandemic

ARUP created a paper in September 2020 specifically looking at the importance of light within post pandemic recovery

Noting that our night-time trends will likely change; perhaps altering our habitual social timings as businesses increase flexible working practices, or home workers join colleagues later in the evening to socialise.

We may need incentivising to leave our homes and spend money after dusk. People will need to perceive a safe journey into town and feel welcome and secure when they arrive. Then, they will feel comfortable to dwell and support night-time economies. Lighting is a highly effective tool when combined with urban policy and benefits diverse stakeholders, but it is often overlooked.

Once shops and offices close for the evening, levels of activity in urban centres drop. However, 50% of modern life takes place after dark. We must rethink the value of urban lighting beyond just a functional add-on for safety or beautification and recognise it as an opportunity and fundamental solution to improve town revenues and the quality of life for our citizens.

<https://www.arup.com/perspectives/publications/promotional-materials/section/the-role-of-lighting-in-supporting-town-centre-regeneration-and-economic-recovery>

Reach, engagement, and impact of the Light Action Plan

The Light Action Plan has shown to have reach in terms of awareness online in the City of Perth in being able to show the city illuminated in various ways such as in respect for Remembrance Day, acknowledgement of cultural events, symbolic holidays which impact on residents, visitors, and those beyond and allow the City to be part of occasions thereby increasing knowledge of the City Worldwide.

Press and Television coverage in propelling Perth into the spotlight has been delivered through a number of the installations.

Nathan Coley (an artists shortlisted for Turner Prize and recognised as one of the highest profile light artists) and the installation in Cutlog vennel received national TV and media coverage as well as being picked up as far away as Canada and US. The work is the artists only permanent 'public realm' piece in Scotland and only one of two in the whole of UK.

Kelsey Montagues Wing mural in Mill Street received international coverage being her first permanent piece in the UK getting significant traction through social media channels with the artist having over 150k followers including significant high profile international stars.

The art commission for Perth Art Gallery in 2023/24 will receive significant media coverage UK wide with Chila Burnham being made an MBE and now one of the UK highest regarded artists since original commission was started. With similar style works having been displayed at The TATE, this will be her only permanent outdoor works worldwide. Similarly, Elisa Arteso who is undertaking the Guard Vennel Installation has been included in the world's top 40 Women Light Artists so is now of high prominence.

As well as attracting focus nationally and regionally on installation 'Meander', the large projected work in Mill Street, allows adaption and as such has allowed the authority to utilise the site for the likes of promotion of The Solheim Cup, to recognise the NHS/Key workers, VE Day 75, Pride events and The Big Big Art Project which was a two-week takeover every year which allows all PKC primary schools to display images and animations over that period.

Other works such as Paula Thompsons glass finial columns installation due 23/24 in the High Street creates a direct link to one of Perth largest key industries of the past in highlighting Pullars Dye works, a significant business not only to the past of local residents but internationally known. This Installation on the High Street will also bridge the cultural quarter of Mill Street to the new Museum at the former City Hall.

The illumination of Perth Bridge (Smeaton's Bridge) since July 2019 and St. Pauls Square since June 2021 have allowed Perth to join a list of world-famous structures and buildings around the World such as Empire State Building, Sydney opera House, London Eye & Edinburgh Castle in using colour illumination in marking and acknowledging key dates throughout the year.

At present we have in excess of 70 requests from charities, organisations, and PKC Equalities Team for requests for the lights to be set to a specific colour(s) and dedicated in tribute to an achievement, remembrance or acknowledgement of an official day or recognition.

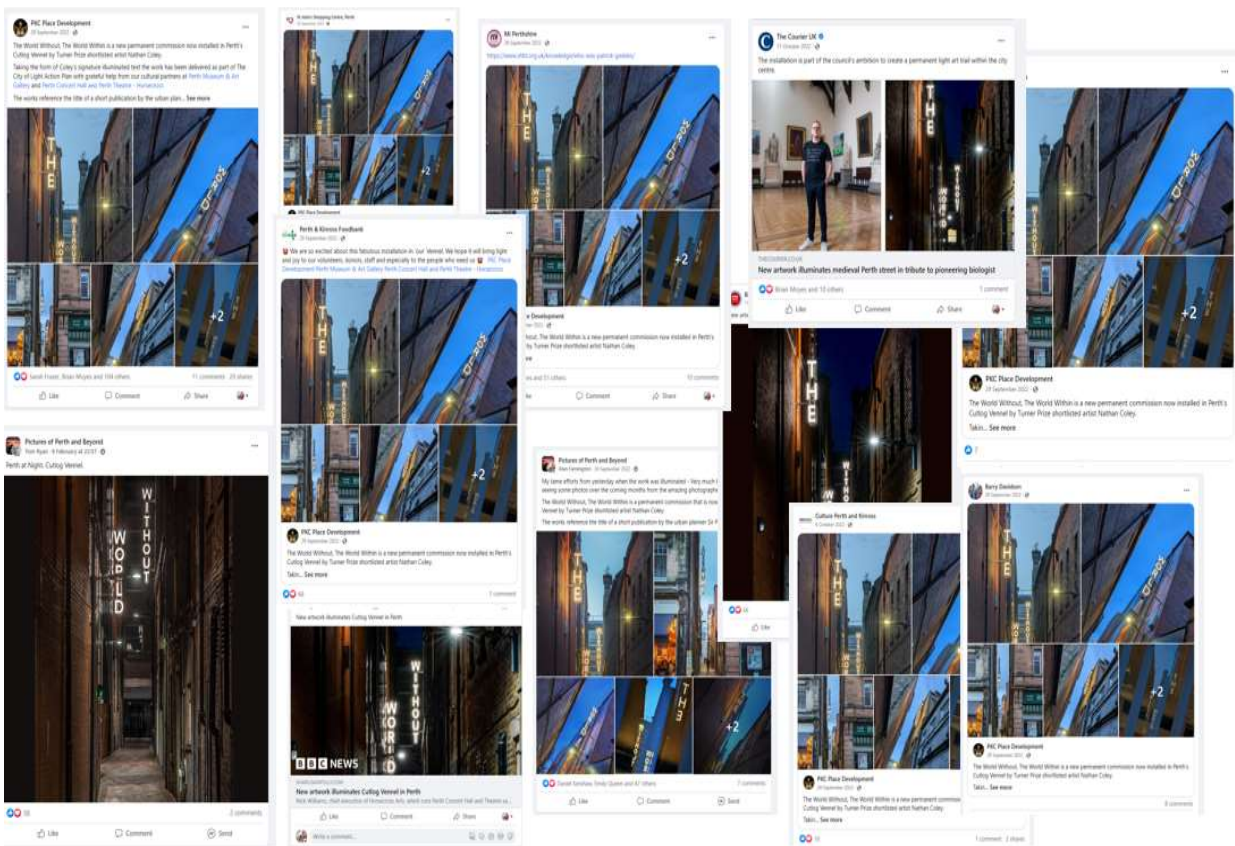
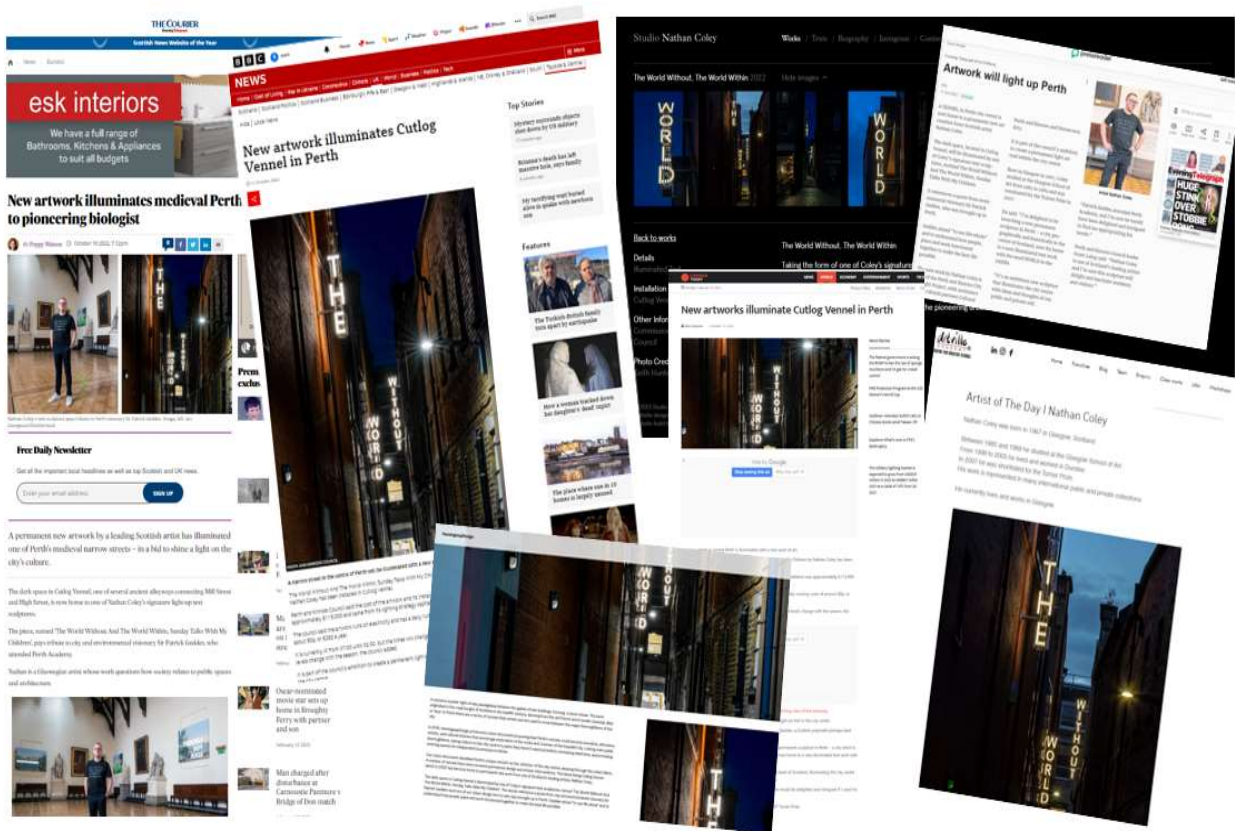
These include marking and showing support Ukraine and those affected, Remembrance, Baby Loss Awareness week, Cancer Awareness days, Perthshire Pride, Mental Health Days, Diwali, National Holidays, Polish Independence, St. Andrews Day and Burns night to name but a few.

Social media outreach from PKC for illumination of the likes of Perth Bridge, St. Pauls, St Mathews etc have one of our highest responses and engagements for posts being in their tens of thousands with large volumes of shares, comments, and interactions.

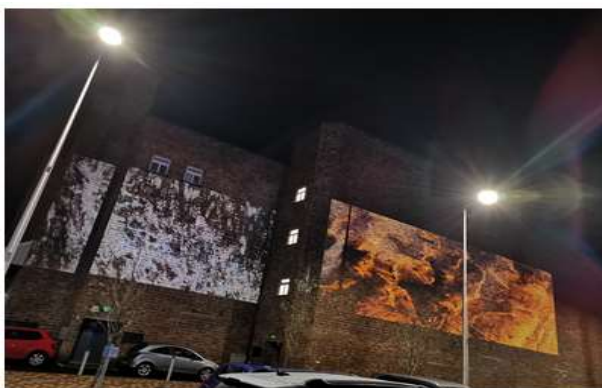
Similarly posts shared on Perth City and Towns and PKC Place development also have high activity and by linking to intranational dates of illumination of structures are shared worldwide and only help to raise the profile of the City.

Posts are tagged and re-shared by the charities, organisations and partners forwarding them onto audiences who may have little awareness of Perth and thus creating a bridge to this gap.

Cutlog Vennel – Nathan Coley Installtion, Selction of Media and Social Impacts



Mill Street – Meander – Social Media and local community engagement



Meander Art Installation



Thank you NHS/Key workers

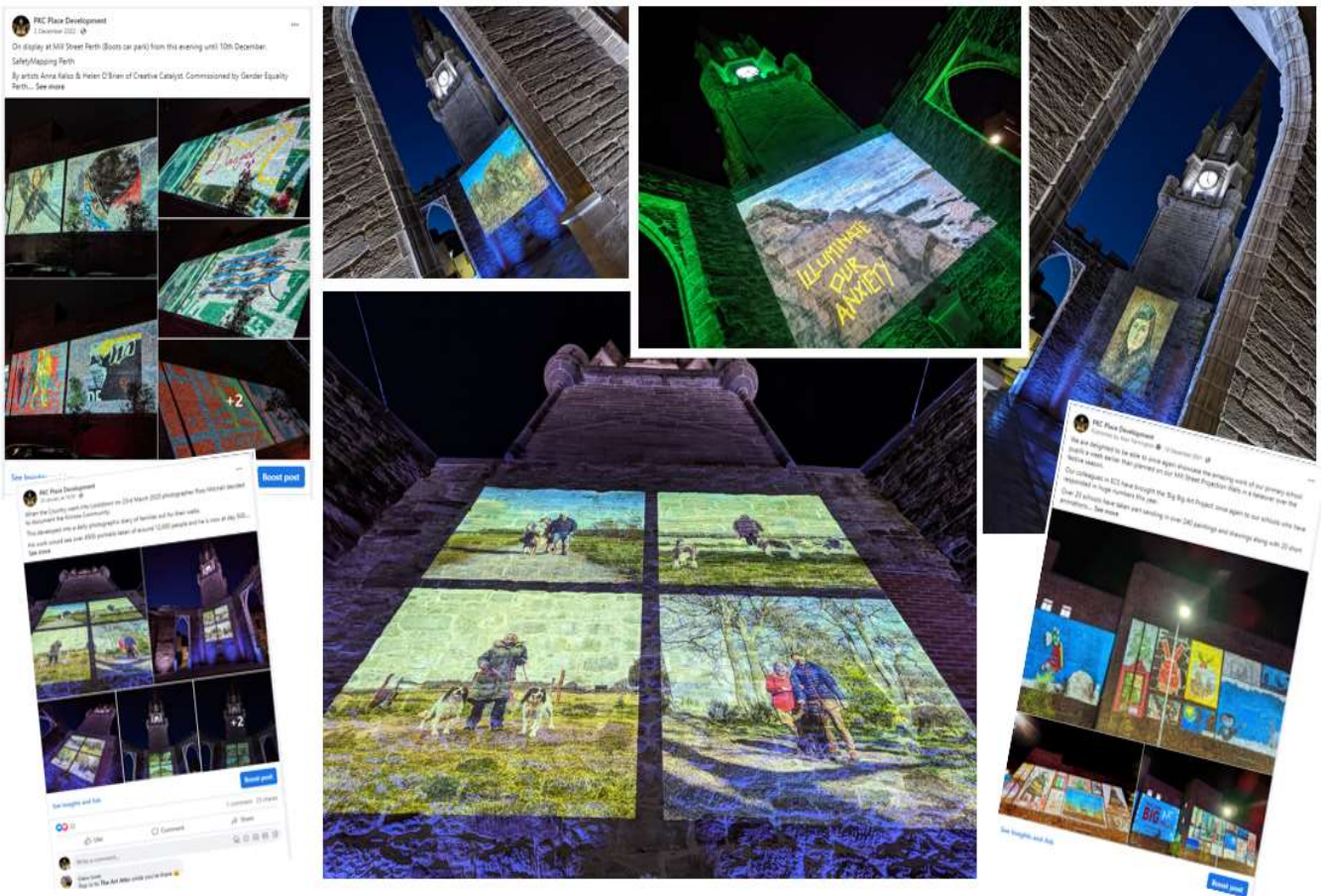
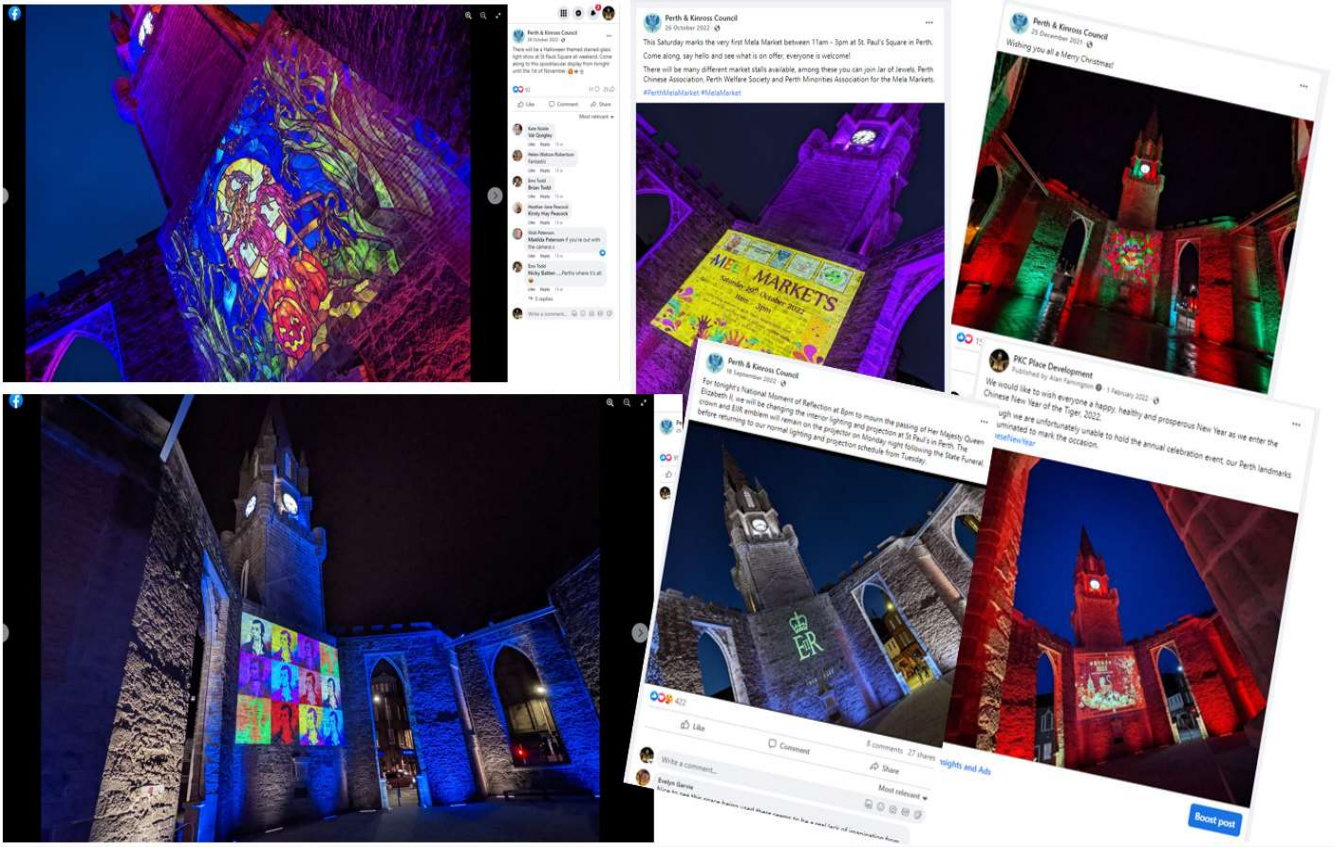


VE DAY 75











Big Big Art Project

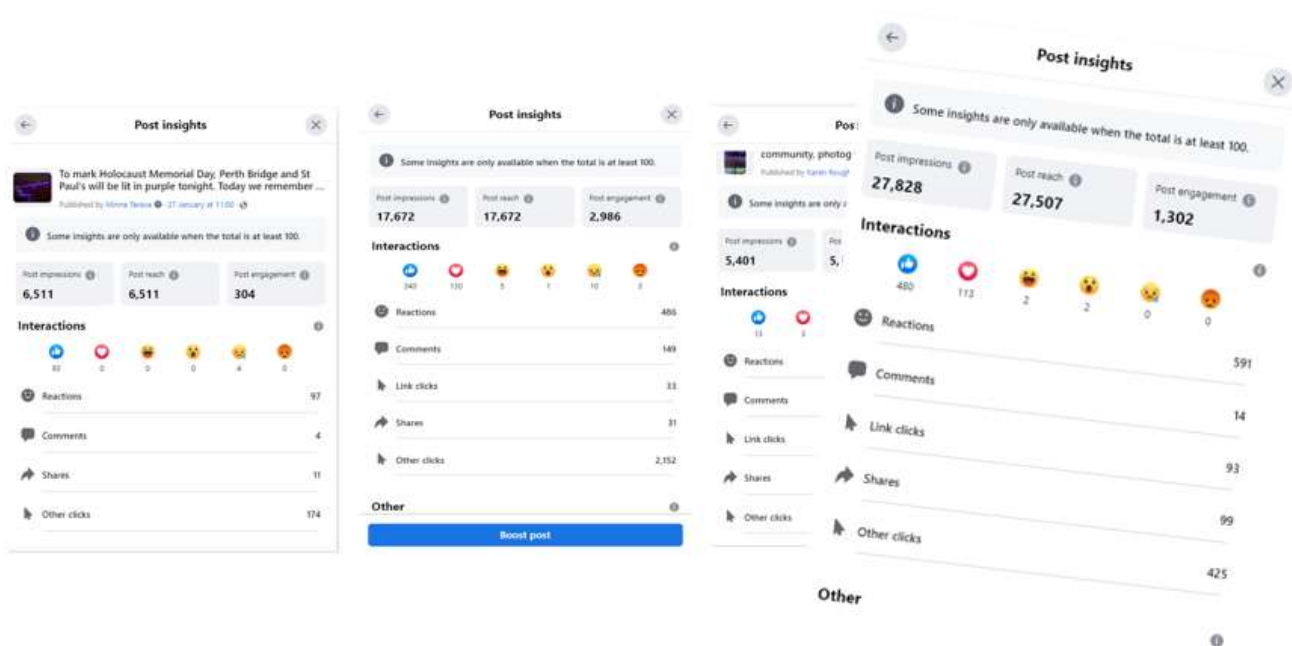
St. Pauls – Examples of use/engagement



Example of Facebook Reach for St. Pauls/Bridge Lighting (single posts)

Posts		Create a post	Last 90 days ▾	Date ▾
	South Inch Lighting Project. A number of you will have noticed stakes in the ground and some ground works starting in South Inch this week. Designed to make the park more accessible, increase safety following concerns raised, allow the likes of running groups new routes at dark etc. and with a view to encourage more footfall to/from town from the likes of Craige b... Thurs, 9 Feb	Post reach	Engagement	Boost post
		7,687	2,057	
	When the Country went into Lockdown on 23rd March 2020 photographer Ross Mitchell decided to document the Kinross Community. This developed into a daily photographic diary of families out for their walks. His work would see over 4500 portraits taken of around 12,000 people and he is now at day 500. A small fraction of the work, around 1500 portraits, is... Fri, 20 Jan	Post reach	Engagement	Boost post
		4,924	1,705	
	Fantastic Opportunity! Tues, 10 Jan	Post reach	Engagement	Boost a Post
		369	15	
	On display at Mill Street Perth (Boots car park) from this evening until 10th December. SafetyMapping Perth By artists Anna Kelso & Helen O'Brien of Creative Catalyst. Commissioned by Gender Equality Perth. A co-creative project working with a diverse selection of female and non-binary community groups from Perth, visually interpreting their experience of safety in... 2 Dec 2022	Post reach	Engagement	Boost post
		428	58	
	The Perth Wildlife Trail is now all in place!! It will run throughout the festive period and we hope you enjoy this new addition to the Winter Festive Offering this year. #wherechristmasmade #winterfestival2022 25 Nov 2022	Post reach	Engagement	Boost post
		4,607	1,384	
	Following up our post from yesterday the cat may be out the bag (well the Stag 🦌) The Perth Winter Animal Light Trail is a new addition to the city centre and our Winter Festival for 2022 From Saturday 26th November until mid to late January the illuminated animals will be on display outside at Perth Theatre, Perth Concert Hall, 2 High Street Offices (near the corner of... 23 Nov 2022	Post reach	Engagement	Boost post
		8,102	925	
	Something new seems to be appearing around town...? #winterfestival #perth Perth & Kinross Council Perth City & Towns 22 Nov 2022	Post reach	Engagement	Boost post
		679	243	
	It all starts this weekend! Check out all the information below as the Perth Christmas Light Switch On and the Winter Festival returns to the Fair City https://www.perthcity.co.uk/blog/perth-christmas-lights-switch-on 15 Nov 2022	Post reach	Engagement	Boost post
		1,182	112	

(Above taken from PKC Place Development Facebook)



(Above provided by PKC Comms Facebook)

Cost of running lighting

The cost-of-living crises and increases in energy costs throughout 2022 have raised questions on the cost of running the architectural lighting however the lighting installed is highly cost effective and runs on a very low kw output.

Taking the example of Perth Bridge (as the largest lighting installation) below gives the current running costs for information.

Street Lighting have confirmed current costs for energy for lighting runs at 18.6p (per kWh)

The Bridge has 86 LED lanterns on it that run at maximum total power wattage of 50 or 0.05KW

RGBW lights generally generate colours/white from say anything from ¼ to ¾ of the lights on the fixture at any one time - so they rarely run-on full power consumption however the below costs have been calculated on the full power wattage to avoid any dubiety.

The lights run on average each year at 5.33 hours a day, operating from sunset to midnight. This takes in account of a full year where say lights are only on for 2 hours in June but 9 hours in December.

The cost of one 50 light watt fixture is calculated below:

Energy cost calculator

Electrical energy cost calculator and how to calculate.

Select country:	<input type="text" value="United Kingdom"/>	
Typical appliance:	<input type="text" value="-- select --"/>	
Power consumption:	<input type="text" value="50"/>	<input type="text" value="watts (W)"/>
Hours of use per day:	<input type="text" value="5.33"/>	<input type="text" value="h/day"/>
Energy consumed per day:	<input type="text" value="0.2665"/>	<input type="text" value="kWh/day"/>
1 kilowatt-hour (kWh) cost:	<input type="text" value="18.6"/>	<input type="text" value="pence"/>
	<input type="button" value="Calculate"/>	<input type="button" value="Reset"/>
Energy cost per day:	<input type="text" value="£0.04957"/>	
Energy cost per month:	<input type="text" value="£1.48707"/>	
Energy cost per year:	<input type="text" value="£18.09269"/>	

This equates to costs for the Bridge lighting of either:

- 5p per fixture per day or
- £4.30 per day for all 86 fixtures or
- £18.25 per fixture per year or
- £1,569.50 per year for all fixtures

(all above based on maximum wattage)

Essentially the 86 bridge lights are the equivalent of running 2 x 2kw heaters in a house (although the lighting unit price is cheaper than domestic prices)

Street lighting mentioned in December last year they expect the unit price to increase at some point next year by about 10p a unit so that would increase pricing to 28.6p which would take the daily cost over £6.55 per day (again however it should be less as we don't run full power consumption)

As a footnote it should be noted the new LED lighting on the bridge equated to what would be around a £1800 per annum saving on energy costs from what the previous lighting on the bridge would cost to run (albeit the lighting was turned off in early 2019 as half the fixtures were not operational at that point)

Summary of Benefits of the Project

While not exhaustive a number of benefits and risks have been identified and highlighted with regards moving into the final 1-2 years of the delivery of the programme.

Benefit	Organisational Impact and/or Service Impact and/or Impact on Asset Condition
Benefit 1	Help to deliver one of the principal objectives of Perth & Kinross Council to provide a safe, secure and welcoming environment for its citizens and visitors.
Benefit 2	Improved retail trade and the night time economy by encouraging citizens and visitors to remain in the city in the evening. Stimulate exposure and growth in evening/night-time economy of the city.
Benefit 3	Provide facilities to assist in the Council's objectives in delivering the national and local outcomes as part of the Single Outcome Agreement.
Benefit 4	Improved well-being and enhanced quality of life for city residents by improved safety, reduced crime and vandalism, and increased offerings for enjoyment.
Benefit 5	Highlights unique qualities of the city; and provides a stimulus for a more cosmopolitan, vibrant and interesting city.
Benefit 6	The city can be made more legible and easier for people to use after dark, thus encouraging more people to use the city at night and also to walk or use public transport at night thus reducing car reliance.
Benefit 7	Uplift in local property values in the long term due to the factors above.
Benefit 8	Supporting the overall Placemaking Strategies in development of key programmes such as Tay Street, The Golden route, South Street etc.
Benefit 9	Enabling existing staffing positions over the period to undertake the works required for implementing the Plan.
Benefit 10	Support local talent in providing platforms for interest, engagement and opportunities to individuals, businesses and employers through the offers of the programme.
Benefit 11	Help to aid in the overall recovery plan of the City following Covid 19 in not only stimulating artistic and lighting opportunities but in showcasing an offer in the public realm that can be enjoyed by everyone in a safe environment and encouraging people to the city centre.
Benefit 12	Perth is the only City in Scotland looking to offer an enhanced permanent night-time offer through the Light Action Plan.

	<p>More so now than ever as part of the recovery of the city with more UK based visitors likely than overseas over the coming years the City requires a number of unique offerings that cannot be realised elsewhere.</p> <p>If we are to continue to aspire to be one of the best small cities in Europe we need, for once, to be at the front of something in our offer and have something that other places do not. We have with this project something which offers that USP and something which can help to drive Perth as a viable destination not just for day visitors but for overnight and longer stays.</p>
Benefit 13	<p>Through illumination The City of Perth can show itself to a worldwide audience through social media in acknowledgement of cultural events, symbolic holidays, awareness campaigns etc. At present about 70 key events each year are recognised such as VE Day, World Aids Day, Pride, Diwali, EID, Cancer awareness, Baby Loss Awareness etc. Each event allows Perth to upload images of illuminated sites and show case not only our support but increase awareness of Perth as a place and its offering ultimately with the aim of increasing connections and tourism</p>
Benefit 14	<p>Low running costs with limited impact on revenue. The installation at St. Matthews for instance costs only £105 for the entire year to run or 29p per day.</p> <p>The installation on Perth Bridge saves the authority around £1.8k per year</p>
Benefit 15	<p>The works carried out to date on the likes of Perth Bridge and St. Matthews as well as works to St. Pauls help as part of the overall regeneration of Perth. The lighting serves not only to showcase these structures in a vibrant yet tasteful way in the evening but enhance the feeling of the environment around them.</p>
Benefit 16	<p>The Lighting programme being set up as a Framework has allowed to react to events which without would not be the case otherwise. The illumination of a section of North Inch to complete a walking route would not have been achievable through the Street Lighting budget however the lighting plan was able to pick this up as the works fell within its remits. Similarly requests delivered in Pitlochry and Aberfeldy would not have been carried out without the support of this programme.</p>

Risks of discontinuing programme

This City of Light Action Plan was developed and approved in 2017 to aid with the deliverables within the Perth City Plan (2015-2035) By concluding the programme in advance this puts parts of the delivery of the plan at risk.

Further the Lighting budget along with other Placemaking schemes was used towards the overall matched funding proposals for the Community Links Plus proposals and with the level of commitment still under review from Sustrans the element from the Lighting programme may still need to be required to deliver that scheme and indeed any future ones.

While not exhaustive a number of risks have been identified should there be a view to potentially discontinuing the programme which shown below:

Risk	Risk organisationally and overall by terminating programme in advance of conclusion.
Risk 1	The City of Light project has not been imagined to date, the illumination of a number of keys sites in town does not constitute sufficient exposure or interest in or away from the region in increasing the night-time economy, this can only be delivered when a large amount of the plan has been completed in making Perth a destination worthy in terms of visiting for the installations.
Risk 2	While work to date has had a positive effect and enhanced the City Centre, without several key sites being delivered and crucially those of the overall Placemaking Programme, as well as the likes of the night time illuminated trail through the Vennels, City Centre lighting and/or the ‘Seasonal offer lighting’ we will not be able to tap into the underused expenditure from both residents and non-residents for the evening economy.
Risk 3	The lighting budget forms part of the overall City Placemaking strategies such as the St. Pauls renovation, without the realisation of the funding from this budget the lighting for this scheme would not have been realised and further pressures to that budget would have been encountered. Similarly, The Light action plans plays a role in other key projects being realised such as Tay Street, The Vennels, The Golden Route and South Street.
Risk 4	Risk to other programmes or departments such as property/streetlighting for funding the delivery of lighting as part of works such as works to Perth Museum, Perth Theatre, Lower City Mills and new Perth Museum Surrounds. The enhanced Lighting to Peth Bridge in 2019 was never under consideration from Property or Street Lighting due to their budget constraints. The Lighting at the time was in disrepair, well past lifespan and had to be switched off for safety reasons. Had the City of Light Plan never been realised this icon of Perth architecture would be sitting left in the dark causing issues of H&S to users and the environment.

Risk 5	Risk to ongoing and future matched funding programmes such as Dunkeld Road corridor/CLP Bids.
Risk 6	<p>Fundamentally the Framework was committed by PKC to the value of £4.5m. As such this should be contractually honoured notwithstanding the residual risk of litigation.</p> <p>The Framework was not set up as a vehicle to renege on the contract in the future but to allow flexibility to PKC in the knowledge that it would be impossible to put the various different projects of the Light Action Plan into specific timelines due to the co-dependency's of other departments and viability of assets due to other works as well as differing time required to acquire leaseholds/legal agreements with a large amount of different bodies.</p> <p>In addition, it was set up as a framework to allow increased spend in the future on the basis of other funding being achieved not to see it decreased.</p>
Risk 7	Reputational risk to PKC for reneging on an ongoing contract.
Risk 8	The contractors have entered into the contract in good faith and have lost the ability to tender for other works due to commitment to honouring works via the Framework. Again, residual risk of litigation due to loss of earnings.
Risk 9	Risk not only to the employees of the three contractors directly involved within the Framework but also to their businesses and partners as a whole as a result of loss of revenue/income from contract. Again, residual risk of litigation due to loss of income.
Risk 10	PKC officer's role was agreed and financed on approval of the Project.
Risk 11	Failure to develop and progress deliverables both within the Perth City Plan (2015-2035) and City of Light Action Plan.
Risk 12	Reduces the Councils ability to meet National and Local Single Outcome Agreement.

Projects completed or in construction phase

Perth Bridge – Completed July 2019

Works were completed 10 days ahead of schedule on 21st August 2019 despite some adverse conditions throughout the installation.

The works involved the removal of the architectural lighting on the north facing elevation of the bridge, which had been in place for almost 30 years, was well beyond its intended lifecycle and in a state of repair that required it to be replaced.

They have been replaced by more energy efficient LED lighting which greatly reduces the previous power consumption and running costs of the Bridge. The light fixtures are full RGBW control which allows the council to acknowledge when appropriate awareness campaigns and events in aiding with the animation of the city centre which has proved very popular and well received by residents and visitors.



Norie Miller/Rodney Parks – Completed Nov 2019

The first location for lighting installations - Norie Miller and Rodney Gardens were both seen as an enhancement of the park and overall area but also to allow a location for long term on site testing for the suitability & capability of products that were/and are to due be used throughout the full City of Light Action Plan project.



Meander Light Art Installation – Completed Nov 2019

Commissioned in 2019 after an open call in 2018 Meander is a projection installation which celebrates the River Tay by environmental artist Elizabeth Ogilvie.

The hour+ long film uses imagery from the Tay and bringing the river back into the heart of the city. The three projectors used for the installation have been used for ‘two-week takeovers’ of the permanent installation to show visual works by Perthshire Primary schools as well as promoting events in the city and recognising key dates/events such as Thanks to Key Workers, Pride, VE Day & the St. Johnstone Cup wins.

Owners signature on legal docs was finally attained in April 2020 for installation of sculptural element however the pandemic meant this could not be installed.

Further the Owner has now applied for new entrances which will mean a slight change to design will be required prior to install



Meander Art Installation



Thank you NHS/Key workers



VE DAY 75



Big Big Art Project



St Matthew's Church – Completed June 2019

Seen as one of the key architectural building within Perth, St. Matthews Church was seen as integral to the development of the City's Lighting Strategy – Agreements with church as to functioning, control and ownership of the equipment were drawn up in legal documents where the asset would be owned & maintained by PKC.



Aberfeldy Square – Completed March 2020

Works within Aberfeldy Square were completed in February 2020 however as the lights were commissioned in March these were only checked in September due to travel restrictions and lighter summer months.

The removal of the tree lighting (due to the smaller trees installed by Greenspace) mean that some new lighting for the square needs to be considered to increase lighting levels in some areas of the square – works should still fall within original cost estimates.

Aberfeldy & Pitlochry War Memorials - Following years of requests for illumination of these war memorials specifically around Remembrance these two monuments were installed and activated late 2020



St Pauls Church – Completed June 2021

As well as ability to hold events St. Pauls Sq. consists of a main projected wall which has been utilised to promote awareness but also showcase art – This can be by basic photographic imagery or by animation. The redevelopment and lighting have reinvigorated this area.

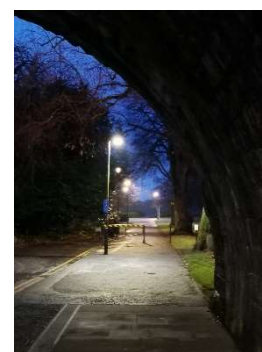
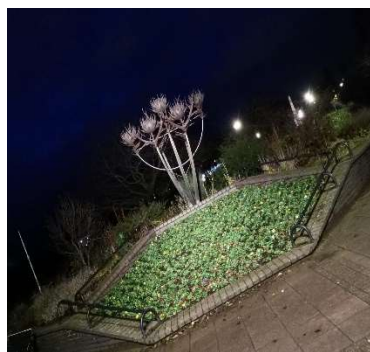
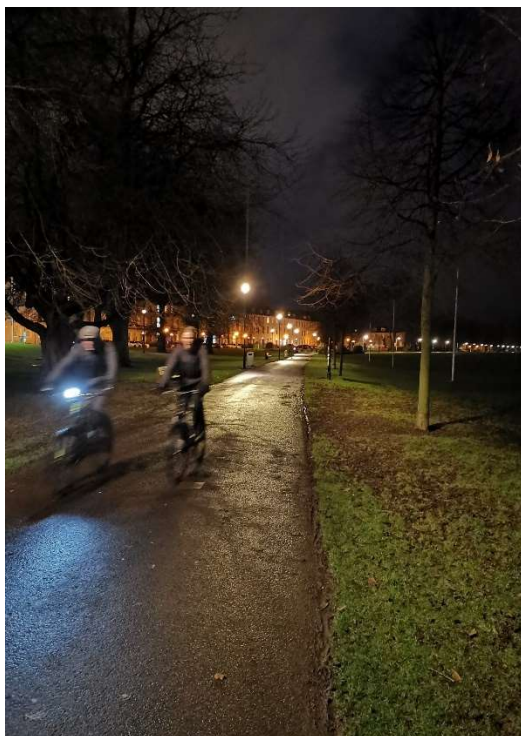
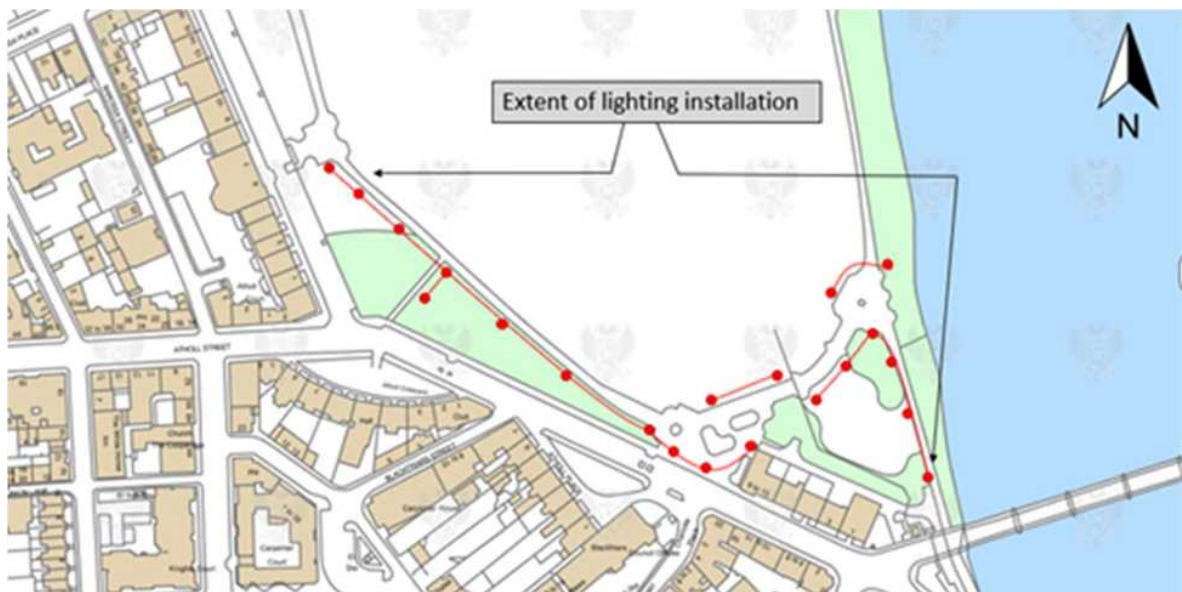


North Inch Lighting – Completed Nov 2020

Given events of 2020 and the increased use of parks and open spaces, as well as requests from various groups and users over the past couple of years a section of lighting was installed that was 'missing' to finalise the connection from the North Inch to Tay Street and to help users to feel safer within the park throughout the darker nights of the year.

The section of lighting installed is from the area of footpath within North Inch from the junction of Rose terrace running adjacent to Atholl Street through to the North Inch connection under Smeaton's Bridge covering a length of approx. 380m in total.

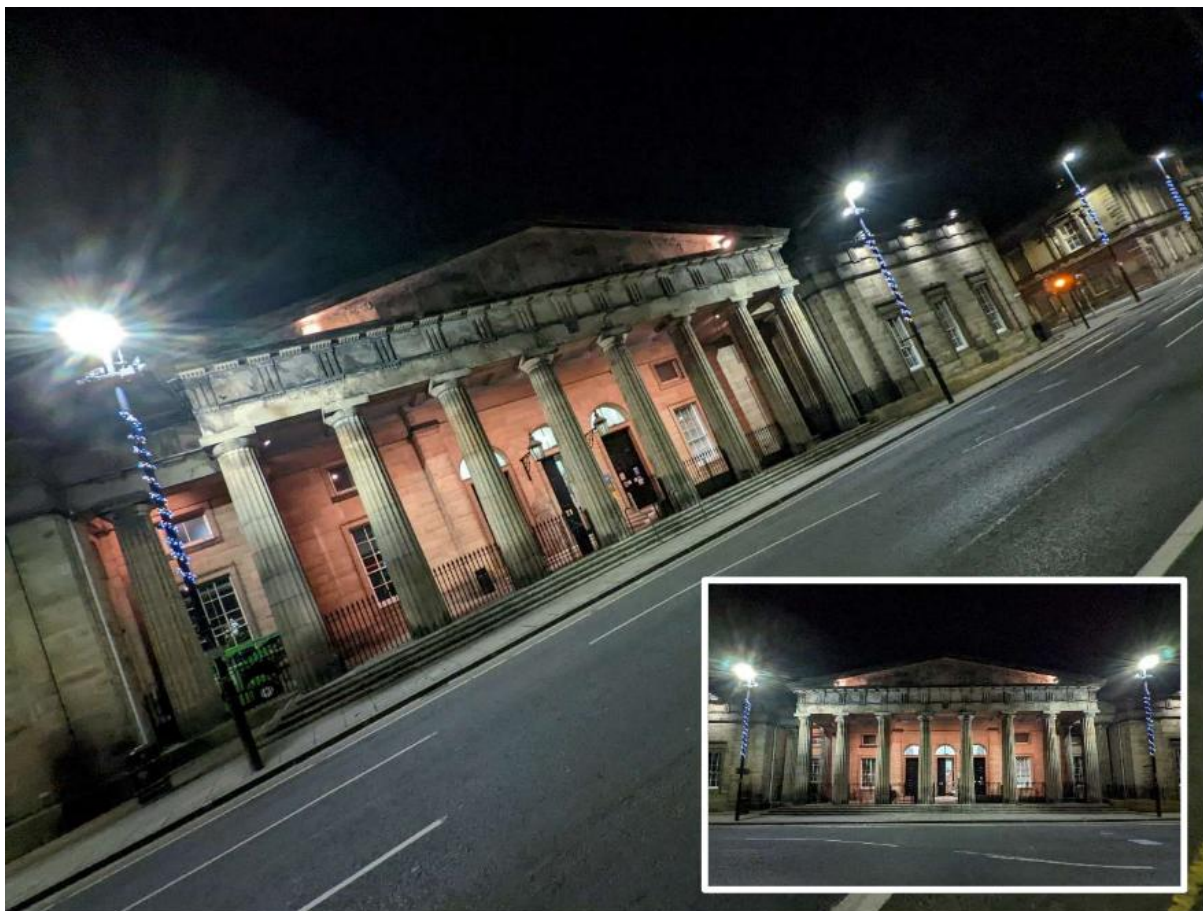
As well as functional street lighting the works also see various memorials and sculptures within the section illuminated.



Perth Sherriff Courthouse – Completed Apr 2022

One of Perth's landmark buildings has been illuminated for the first time in decades this year. Perth Sheriff Court will join other lighting projects such as Perth Bridge and St Matthew's Church in being lit up at night to highlight the stunning architecture along Tay Street. It is situated on one of the major routes through Perth overlooking the River Tay to the East and is a significant piece of early 19th century civic architecture. It is illuminated as part of the City of Light Action plan in partnership with Scottish Courts.

The Action Plan is developing and significantly enhancing feature and decorative lighting in Perth replacing the large, outdated lamps with modern LED fixtures offers Improved Environmental Performance with a 60% to 70% improvement in energy efficiency, longer lifespan of products and greater reliability.



Installation of light art text installation by renowned and Turner Prize nominated artist Nathan Coley – ‘World Without – World Within’ is situated on two aspects of Perth Theatre and one on the tenement close to entrance of the High Street.

Taking the form of one of Coley’s signature illuminated text sculptures, the artwork is installed in Cutlog Vennel - a city centre pedestrian laneway between High Street and Mill Street, Perth, Scotland.

Referencing the title of a short publication by the pioneering urban planner Sir Patrick Geddes (who attended Perth Academy), the phrase echoes Geddes aim ‘to see life whole’ and to achieve a better understanding of human beings in the natural, built, and social environment.

The artwork evokes questions of private and public life, internal and external thoughts, and notions of work and play



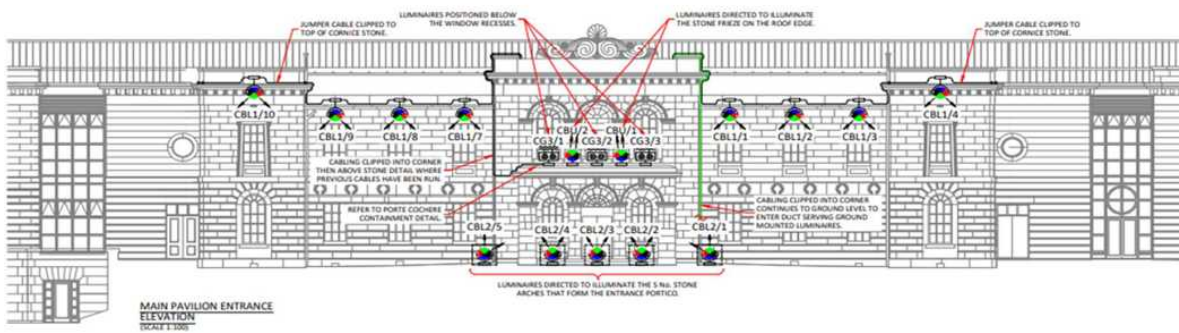
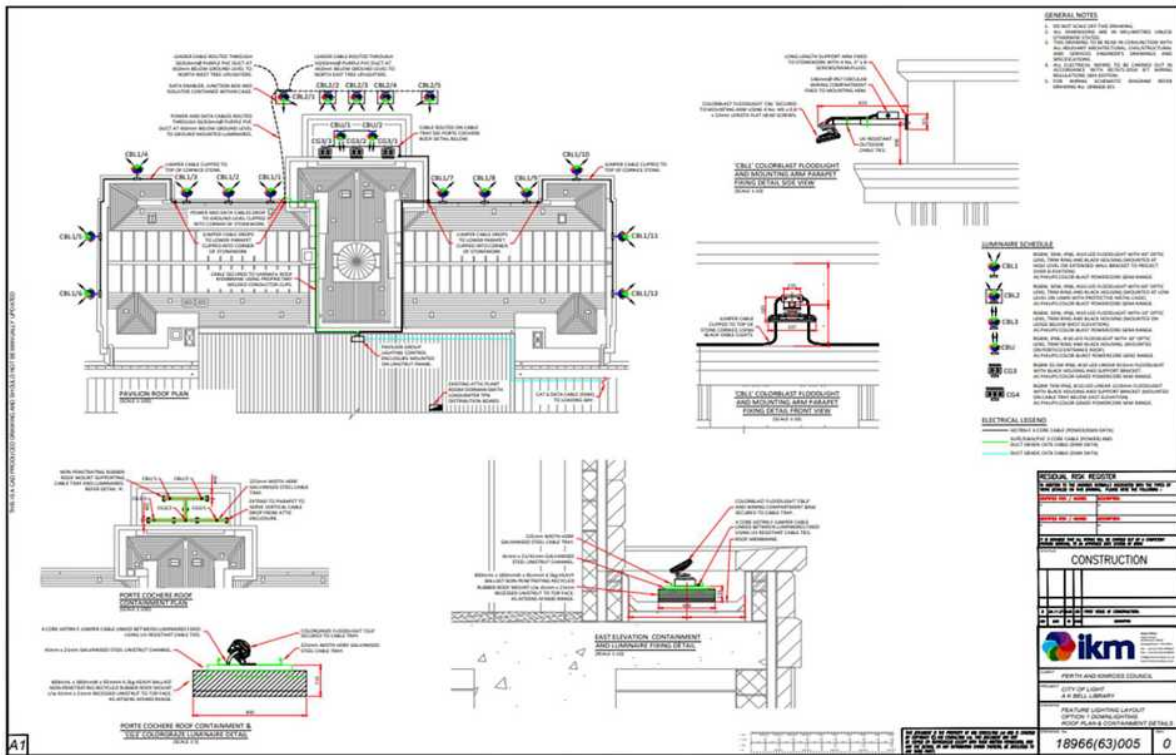
Perth Concert Hall – Completed Dec 2022

Dating back over 18 years the existing lighting around the exterior of Perth Concert hall had started to fail as its lifespan has exceeded. Also made from older SON lighting technology the lighting has been superseded by newer more efficient, cheaper to run and sustainable LED products – Installed late Nov 22 the new lighting has full colour control to enable to respond to lighting requests and tie in with events externally and internally.



Perth Library – Completed Dec 2022

Works to enhance the area around the library, car parks etc with modern led fittings as well as on building lighting are being phased with the first phase installed and completed Dec 22



Winter Animals – Completed Nov 2022

Devised to enhance and increase the period of Winter Festival from November to end January the Perth Winter Animal Trail was introduced last year and proved highly popular through both engagement online and note of frequent photography of users especially around Perth Concert Hall and Theatre. The bespoke designs which play on one of Perthshire biggest assets in Wildlife create a new modern take on festive lighting.

The plan would be to introduce more installations in future years to create a trail surrounding the city centre businesses to increase footfall to locations/provide a differing offer to the likes of Edinburgh and Glasgow. There has been interest in rental of pieces out with the Perth Winter Festival period from operators and use at other events owing to the 'non- Christmas' theme allows lots of possibilities of use. The two pieces commissioned for 23/24 are Osprey and Red Squirrel.



Fergusson Gallery – Completed Feb 2023

All works have now been complete to both the on building and off building lighting and commissioning of install due to be undertaken later this month. Lighting/projections will see this building animated and able to reflect its new use as the photographic collection of Culture PKC

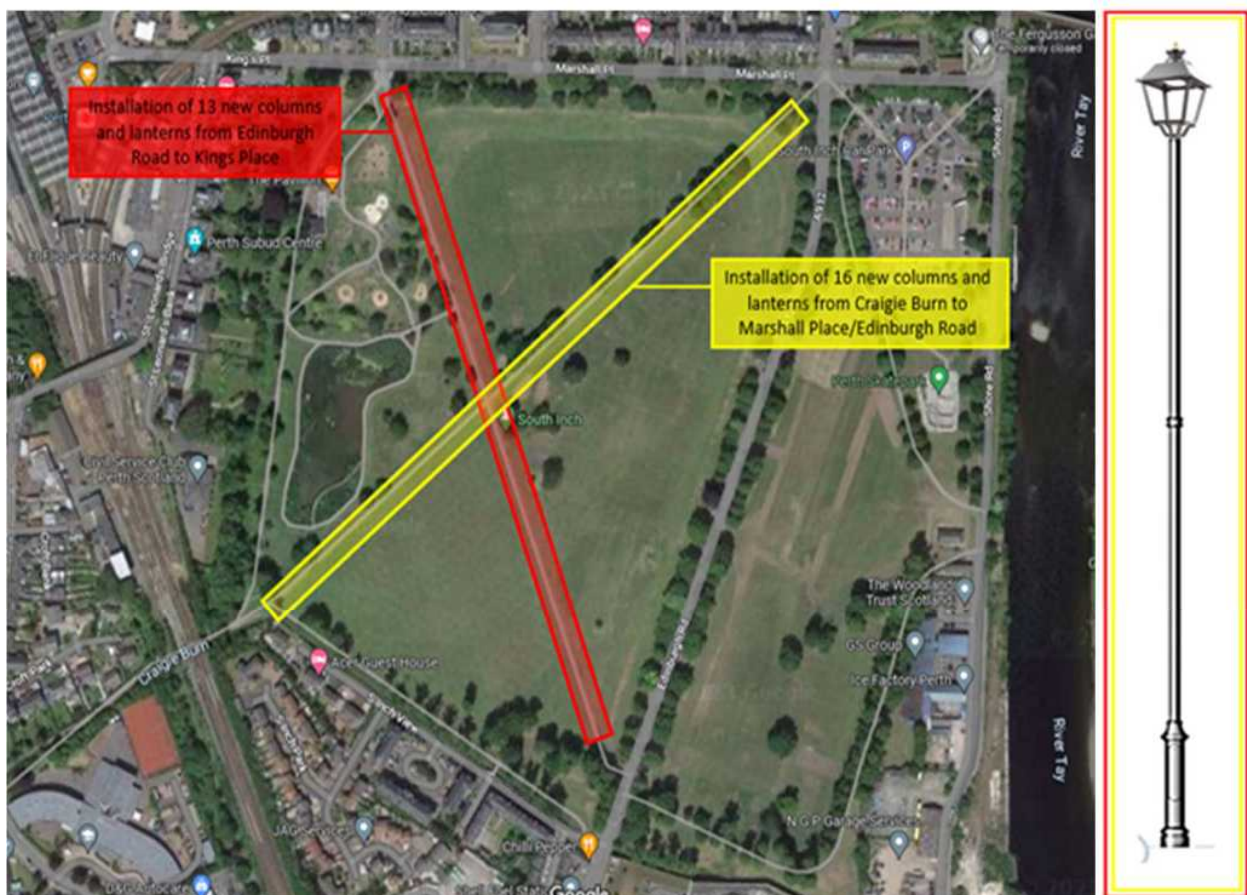


South Inch – Due to be completed Late May 2023

Designed to make the park more accessible, increase safety following concerns raised, allow the likes of running groups new routes at dark etc, and hopefully encourage more footfall to/from town from the likes of Craigue by foot/bike the scheme has installed new sections of lighting along the diagonal path network.

It has taken a considerable amount of time to get approval from Flooding/Reservoir Engineers about bringing new power to site and ducting routes for the lighting in respect of the embankments etc with the location used as a flooding plane, however we gained that approval last year through proposals which will not interfere with any flooding measures. We have also concluded discussions with stakeholders such as Greenspace and Street Lighting and started installation in February 2023

Due to the considerable length of ducting (around 2km) and requirement of new power provision from SSEN as the existing power does not have sufficient end supply works were expected to take around 8 weeks. While the columns and majority of the cabling have been installed works are expected to be complete end May 2023 owing to delay in getting SSEN connection for new supply to site.



Skinnergate – Completed May 2023

The original string lighting which had been installed for over 7 years (prior to the start of the lighting plan) and had fallen into disrepair and subsequently was removed Jan 23.

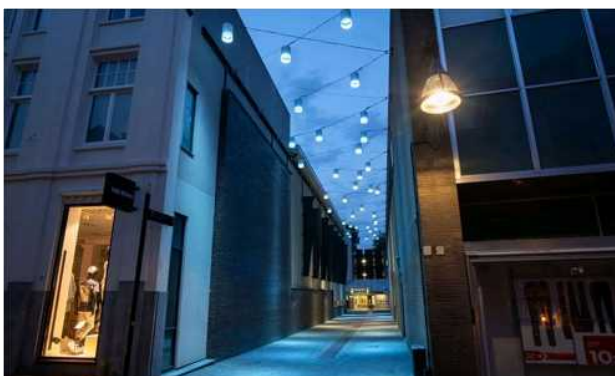
Owners and Businesses had been written to around a new scheme to look at any objections/level of support. Approval following redesign of some fixing location were gained and works started early May and were completed within a two-week period. Some additional work will be carried out to enhance the work but falls within original budget.



Frosted Globe



Basic 3D Printed mockup of lantern

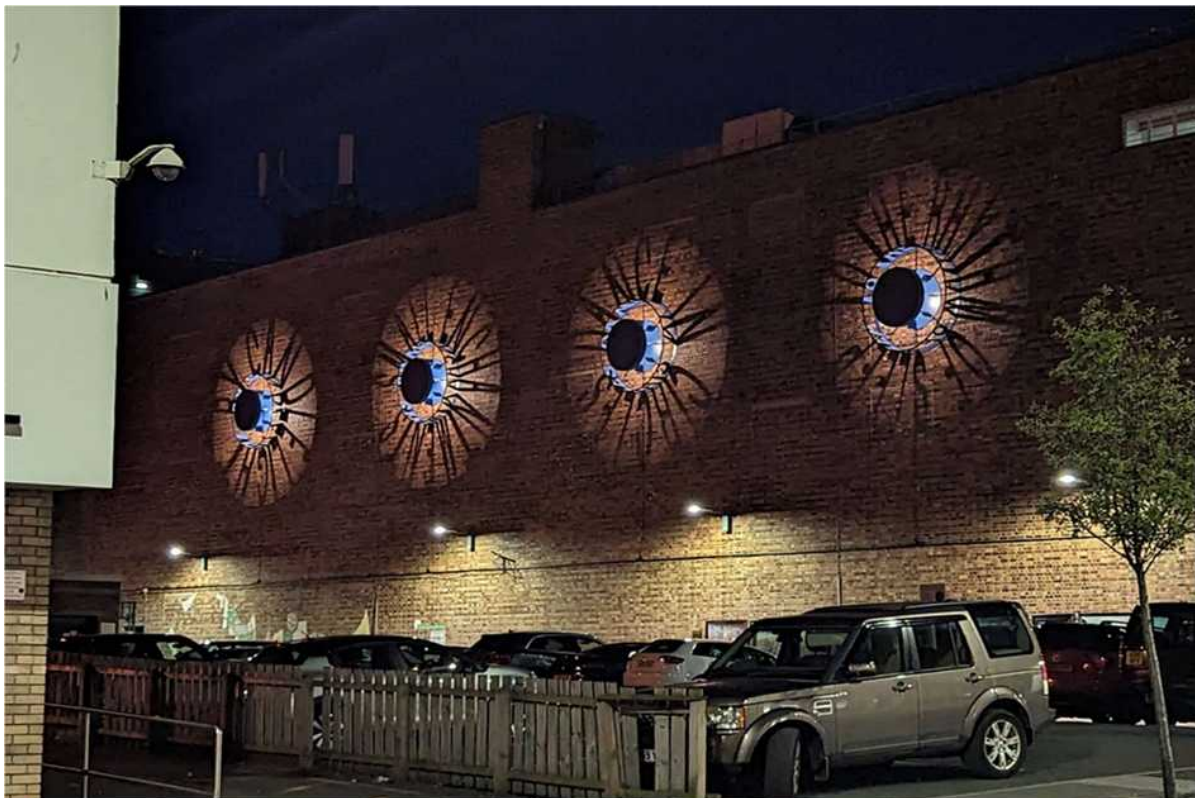


Guard Vennel – Completed April 2023

Another commission that has been taken forward from the Lighting Strategy is with artist Elisa Atereso. Other works/artists had works considered for this wall however following consultation with Eight Investment (Building owners) it was agreed to take forward Elisa's works.

Elisa is one of the most highly regarded Light Artists within the UK and has works on display in London, Manchester and York as well as exhibiting internationally.

The work used a casting process (where light is directed through cutting in metals and forms light shadows) While the work is now installed, and some press has been issued the official launch will be held back until Autumn to coincide with darker nights returning.



Works Issued with expected completion in 2023/24

Perth Art Gallery Light Commission & Building - Nov 2023/Feb 2024

Chila Kumari Singh Burman MBE is a British artist, celebrated for her feminist practice which examines representation, gender and cultural identity. She works across a wide range of mediums including lighting, printmaking, drawing, painting, installation and film.

A significant figure in the Black British Art movement of the 1980s, Burman remains one of the first British Asian female artists to have a monograph written about her work; Lynda Nead's *Chila Kumari Burman: Beyond Two Cultures* (1995).

In 2018, she received an honorary doctorate from University of the Arts London for her impact and recognised legacy as an international artist. In 2020 she was invited into the Art Workers' Guild as a Brother and in 2022, Burman was appointed a Member of the Order of the British Empire (MBE) in the Queen's Birthday Honours for services to visual art.

Commissioned to undertake an installation similar to that once shown on the TATE Britain Chila's work would be a permanent installation and as well as refocusing Perth Museum and Art Gallery to Perth Art gallery alone the works form an another very important installation as part of the City of Light Plan to create permanent outdoor Light Art trail in Perth making it a UK First.

Installation is expected late 2023/early 2024

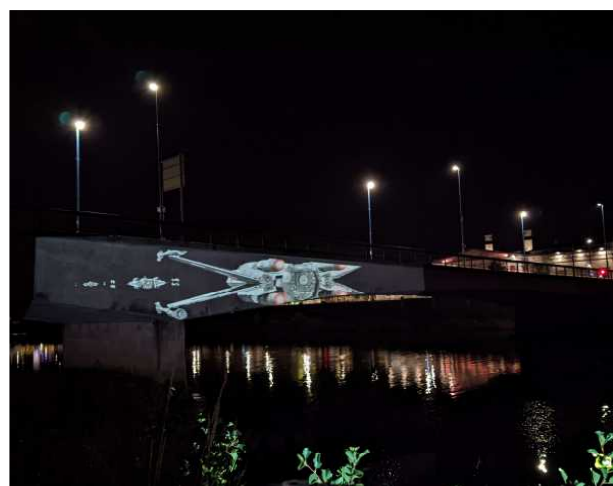
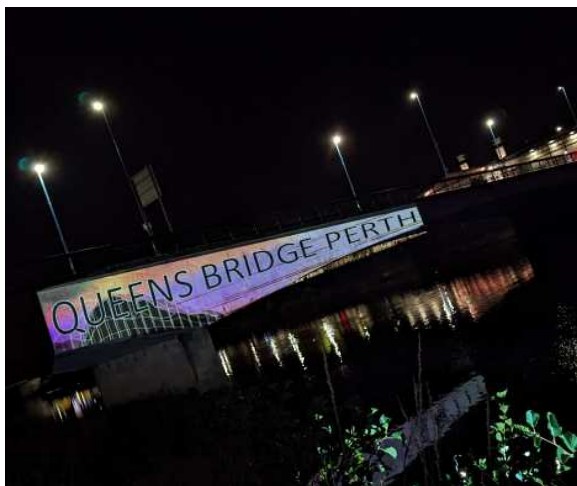


Queens Bridge - Oct 2023

Queens Bridge has been a challenging Lighting project. With Structures not looking to add extra weight to the bridge and their being too small and elevation (bridge arch) to hit with remote lighting a number of different modes of illumination were considered

A basic projection map test in Oct 2022 took a single laser projector which was able to cover around half the bridge, some imagery is shown below.

Basic projection mapping delivered results above expectation, installation of works can be carried out off bridge and at a far reduced cost of on bridge lighting as well as having huge adaptability in what is being projected (tie into events/promotion etc)

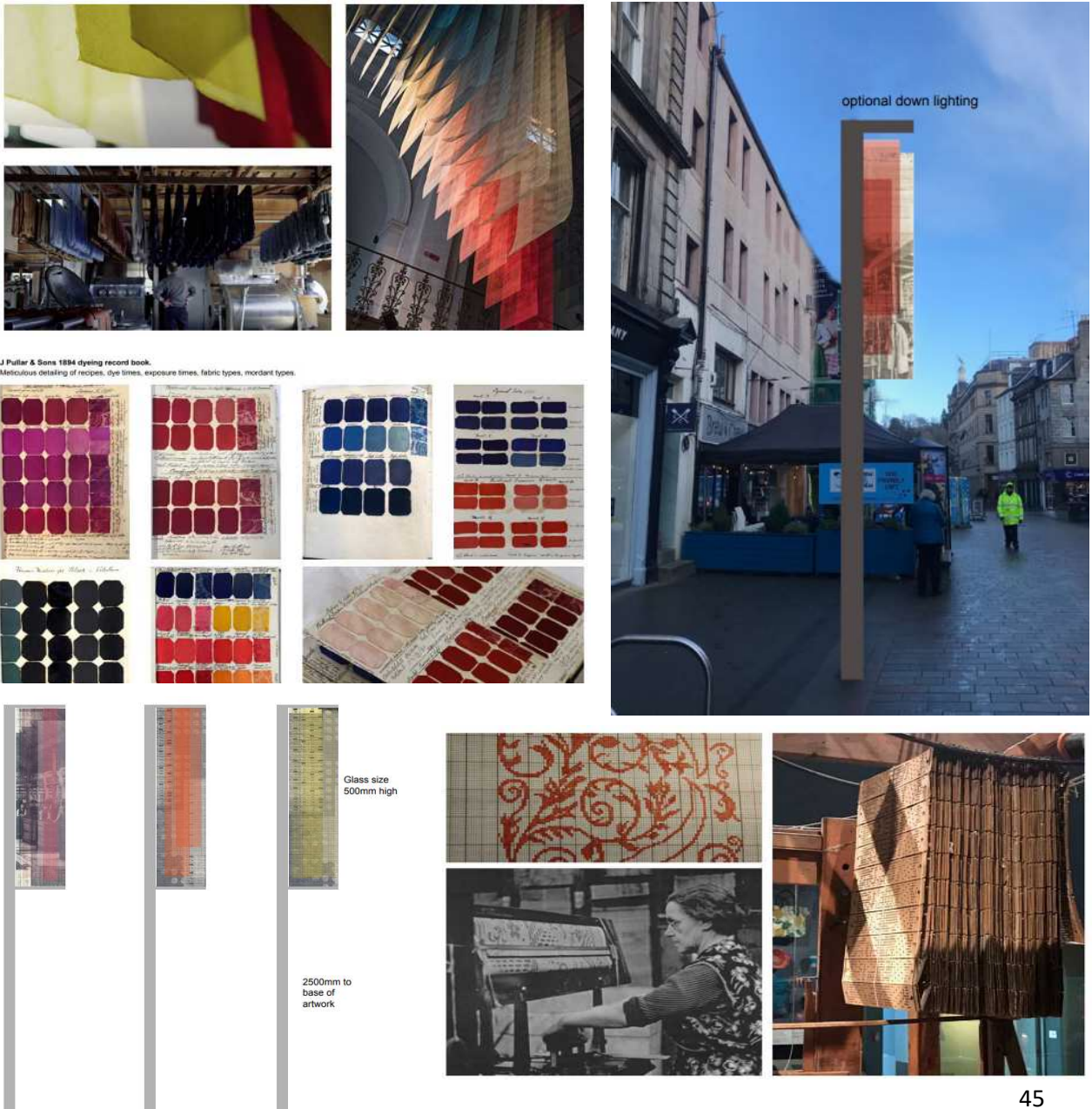


High Street Columns Commission – Nov 2023

Having spent significant time within the archive departments of AK Bell Library and Perth Museum and Art Gallery researching weaving and dyeing companies in Perth the artist Paula Thomson was inspired by the processes involved in both the creation of textiles and the subsequent surface decoration. Inspired by the story of Pullars and looking to combine the tradition of dyeing and weaving with the potentials that modern materials and techniques can have to present them in a unique and contemporary way.

Set on a bespoke column in toughened glass or UPVc Panels the illuminated fins would be a modern take on a tapestry telling the story techniques of Pullars. Branching what once dominated Mill Street this installation proposed for the High Street highlights its place in Perth's history and bridges other stories within the new Perth Museum to open in 2024.

Paula's Design proposal was the open commissions chosen submission and design proposals are currently with Engineers who are evaluating requirements around loadings/footings as well as the bespoke column manufacture, installation is expected late 2023





8 no glass panels would be lit either from channels top and bottom, or along the side of the glass, subject to dialogue with lighting engineer.

Lighting structure either rectangular or circular, not to distract from the glass artwork. Exact lighting details developed after consultation with lighting engineer



suggestions



Lower City Mills 2024 (dependent on other building works)

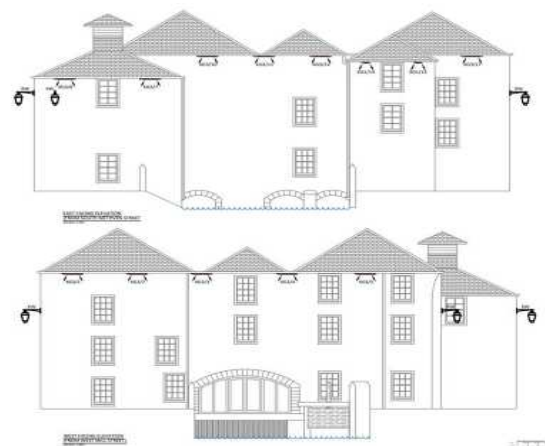
To coincide with large scale renovation works to Lower City Mills we are looking to enhance the lighting to the main Lower City Mills building but also of the surrounding area (West Mill Street/Mercure Hotel and car parks surrounding) this will be with a variety of grazing lighting fixtures and heritage style lanterns & projection mapping to Mill Street Elevation. LBC & Planning consents are required for approval prior to commencement.



Initial Remote Light Testing 'washed out' the building – compare difference of stone above and right (remote lighting in red – White on building to the right) as a result on building graze lighting (similar to that at St. Pauls is being sought via LBC) Heritage fixture 2nd right



Basic Projection testing (not mapped) above Below main elevation lighting proposal drawing



Winter Animals Year 2

Devised to enhance and increase the period of Winter Festival from November to end January the Perth Winter Animal Trail was introduced last year and proved highly popular through both engagement online and note of frequent photography of users especially around Perth Concert Hall and Theatre. The bespoke designs which play on one of Perthshire biggest assets in Wildlife create a new modern take on festive lighting.

The two pieces commissioned for 23/24 are Osprey and Red Squirrel.



Design Briefs Still to be issued:

St. Johns Kirk

Owing to works currently ongoing with Perth Museum design development of lighting on/around the Kirk was paused to take account of the ongoing disruption. However as the project is now coming to close and the lighting (as with the Concert Hall) is now out of date and failing and as a result robust modern LED lighting is now being in place around Perth Museum we would look to progress with these works in 2024.



Historic lighting pictures do not reflect current lighting levels – Most fixtures are now outdated, using more energy than required and not sustainable





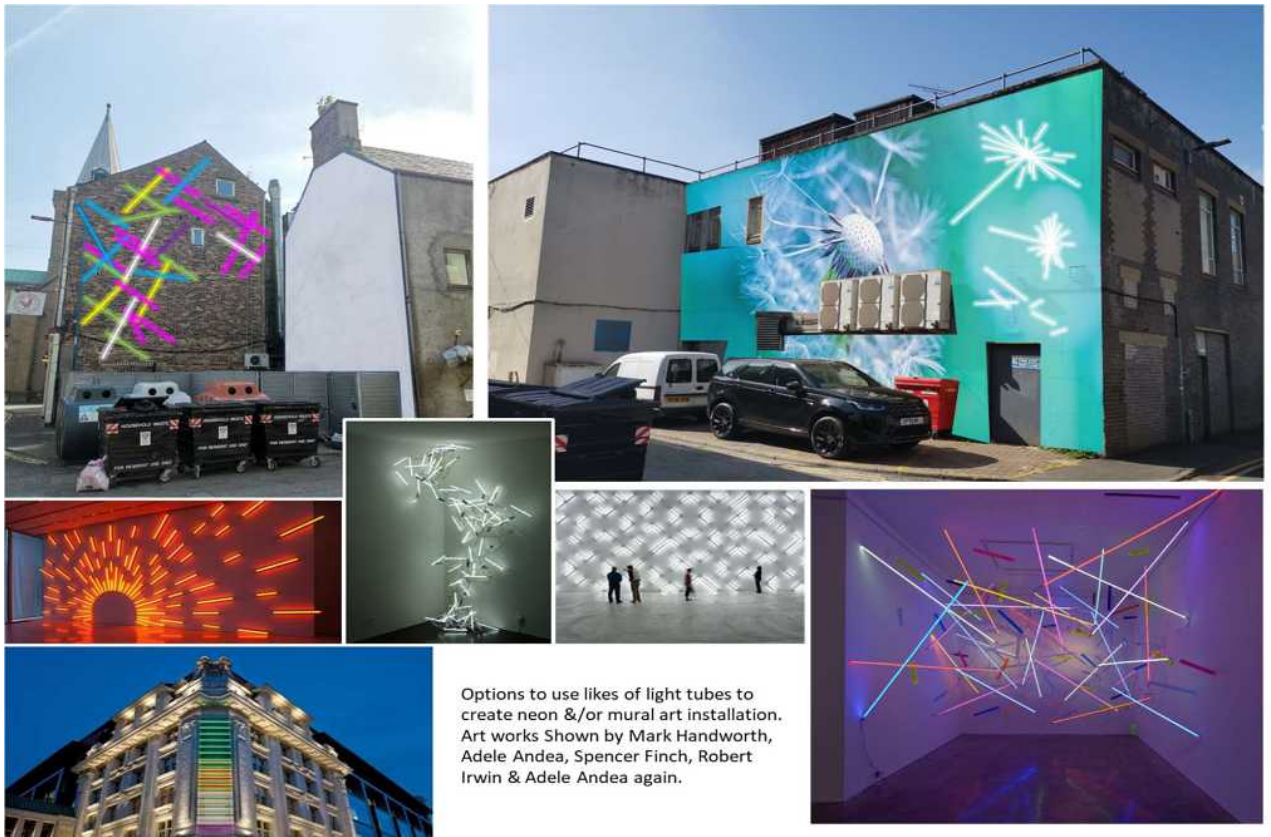
Use of mirrors or Perspex to create light based effects from hung works. A number of residential properties mean full illumination in area not totally practical. Works to be tied into new museum

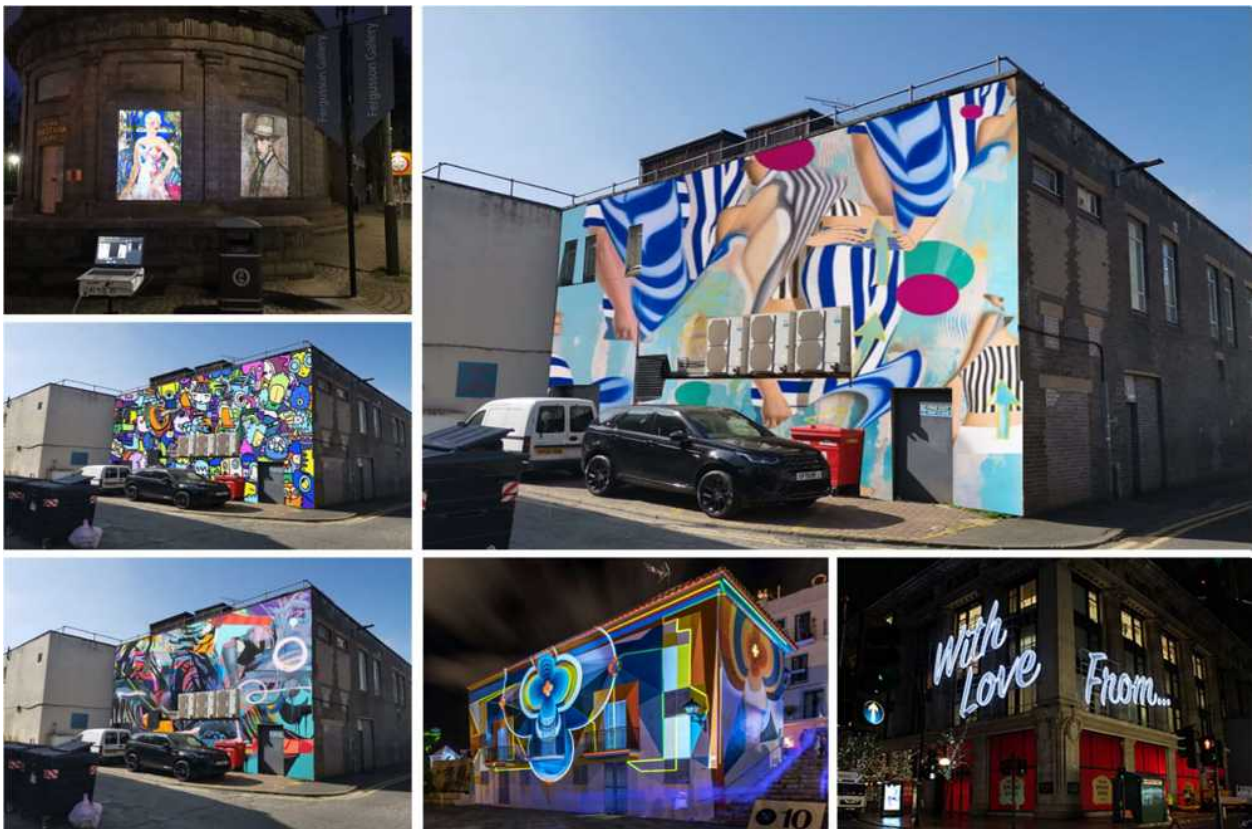


Paul Raff - Waterfront Toronto Underpass Park

Arts Brookfield together with architect and designer David Rockwell - lighting installation named "Luminares."

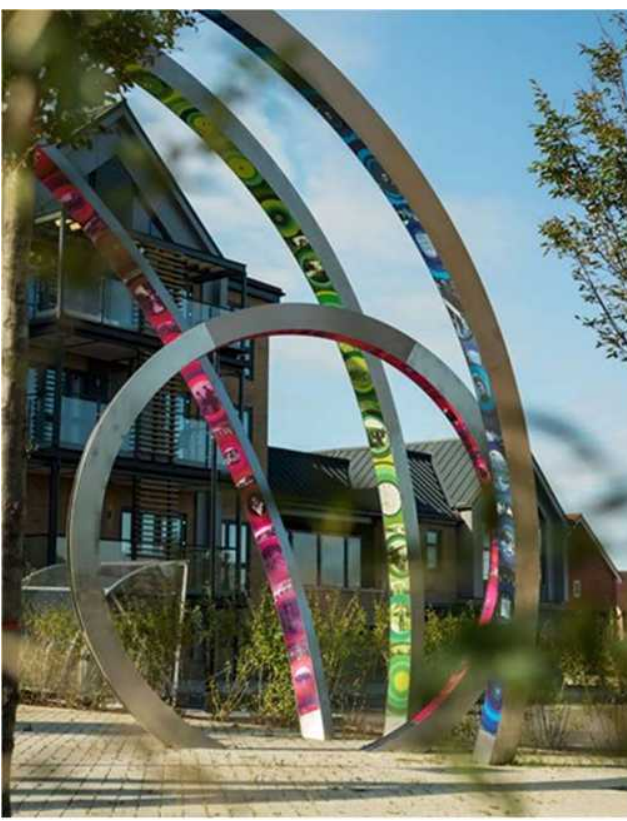
City Centre Streets (Excluding work and other briefs issued to date) *Images for illustration only*

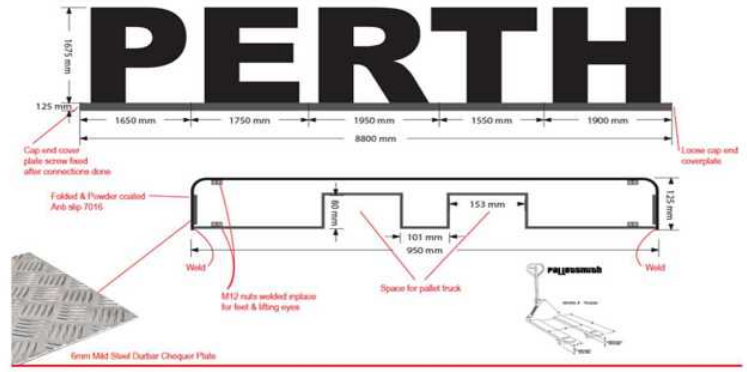




Gateways – Images for illustration only

Four main gateways into Perth (Inveralmond, Dundee Road, Edinburgh Road and Glasgow Road – A unified or individual approach to a lighting led design to be undertaken with a view to installing key features to welcome entry to the City - planned over 2023/2024





Perth Riverside Night Lights 2018 Evaluation



Executive summary

Perth Riverside Light Nights 2018 was the 2nd year of operation of the event which concluded Perth's Winter Festival Programme.

53,518 visitors were recorded as attending the event which ran from Saturday 27th January to Wednesday 14th February.

The Social Media reach for Perth Light Nights at 14th February 2018 was **2,125,276** across Facebook, Twitter, Instagram with Light Nights content with **285,876** engagements (13.45%).

Surveys of visitors were conducted with the following key highlights:

- 63% of visitors were adults with 37% children.
- 72% of visitors were shown to come from Perthshire.
- 71% of users would not have come into Perth had Light Nights not been on.
- 95% of visitors rated Perth Light nights as Very Good or Excellent.
- 48% of visitors said they had dinner in town.

Introduction & Background

Perth Riverside Night Lights completed its 2nd year run as an annual event bringing to an end the Perth and Kinross Winter Festival. The event was organised and financed by Perth and Kinross Council's Economic and Planning Development Units.

The event will take place at Norie Miller Park, within the City of Perth located between Perth Bridge and Queens Bridge, opposite Tay Street in Perth City Centre. *Location Plan as shown in Appendix A.*

As with the 2017 event the thematic illumination of Norie Miller Park formed dazzling light displays and transformed the banks of the River Tay into a magical wonderland.

The overall event was enhanced with various theme nights throughout providing visitors with a unforgettable experience. The themes were supported by live events and performances using the likes of actors, dancers, musicians and music, acrobats, and street entertainers.

In its inaugural year in 2017 the event was a major success with visitor numbers of 50,947 throughout its duration, far exceeding the original estimations.

The 2018 event brought an increase in visitor numbers of **53,518**

The event ran from Saturday 27th January through to Wednesday 14th February, 5-10pm daily.

An analysis of footfall and dates for the respective themes are as follows:

Dates	Theme	Nights	Footfall
27th - 28th Jan	Burns	2 nights	5852
30th - 31st Jan	Superhero	2 nights	8352
2nd - 3rd Feb	Bright Light	2 nights	5199
4th - 5th Feb	Wonderland	2 nights	5630
6th - 7th Feb	Yellow Brick Road	2 nights	5010
10th - 11th Feb	Chinese New Year	2 nights	13411
13th & 14th Feb	Valentines	2 nights	4631
Various	Music & Light	5 nights	5433
		Total	53518

On non-event nights the production consisted of lighting supplemented by music played through the audio system on site.

21CC were appointed as the winning bidder to supply the lighting event production for the event. 21CC were also the lighting event producers for the 2017 event.

Promotion & Reach

The total reach at 14th February 2018 was **2,125,276** across Facebook, Twitter, Instagram with Light Nights content with **285,876** engagements (13.45%).

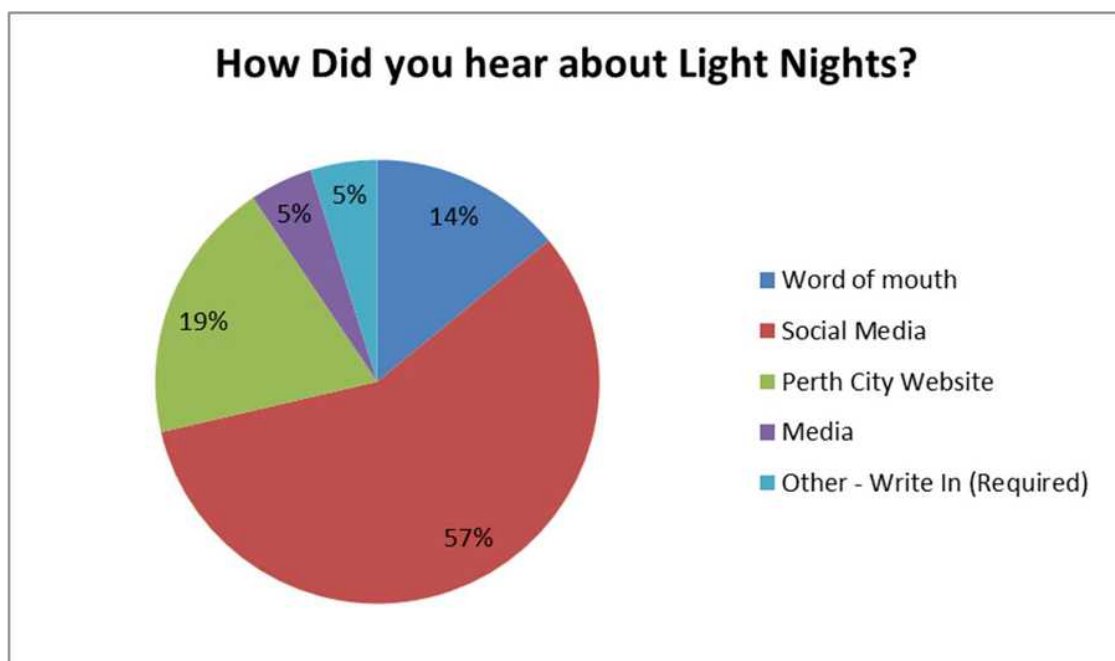
Event attendance via Facebook was up 81% from 4,223 in 2017 to 7,658 in 2018. From the advertising it is shown that 38% of people were from Perth, 27.8% from Dundee, 11.8% Crieff/Pitlochry/Dunkeld and 8.1% from Aberdeen.

The Riverside Light Nights page on the website had over 33,000 page views. Top traffic sources were Google (46.6%), Facebook (30.8%), Direct (8.5% including internal PKC server (6.2%).

Top locations for web traffic were Perth (34.4%), London (16.1% - likely to be more than just London), Dundee (13.2%), Edinburgh (7.1%), Glasgow (5.6%)

A media event held on Friday 26th January between 6-8pm to showcase the site prior to start, local press and other media sources including key bloggers and social media users.

Surveys conducted of visitors found that the following channels shown in the chart below led to awareness of the event:



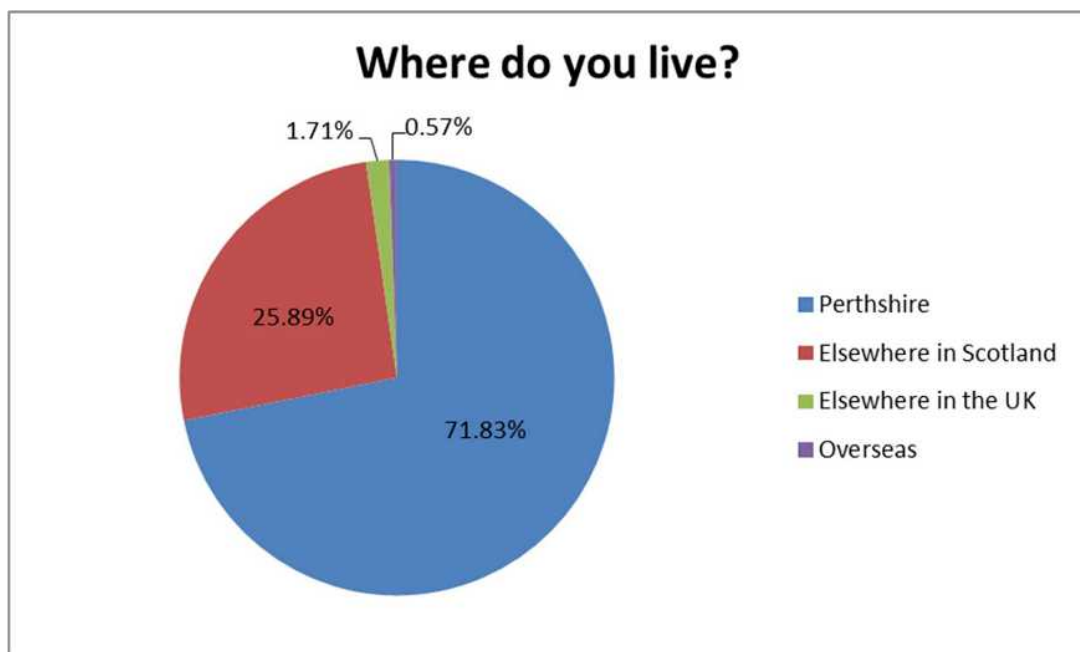
Evaluation of Survey Data

Two surveys were conducted with visitors to Riverside Light Night. The first survey was conducted with visitors specifically in relation to the 'Burns Night Weekend'. The second survey was issued in respect of the event as a whole. Where questions were duplicated the following shows a combination of the results. Other questions that were not repeated but which were useful in context of this report are shown to provide as further information. The total number of responses to the surveys was 704.

A selection of some of the comments received from visitors is shown in Appendix B.

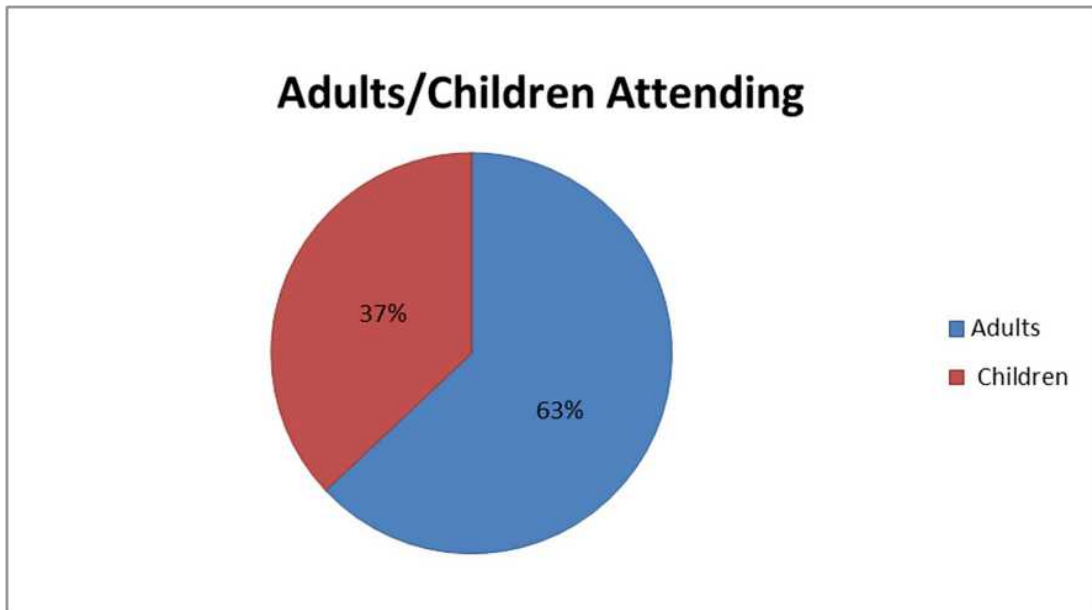
Audience Profile:

Visitor Geographical Locations



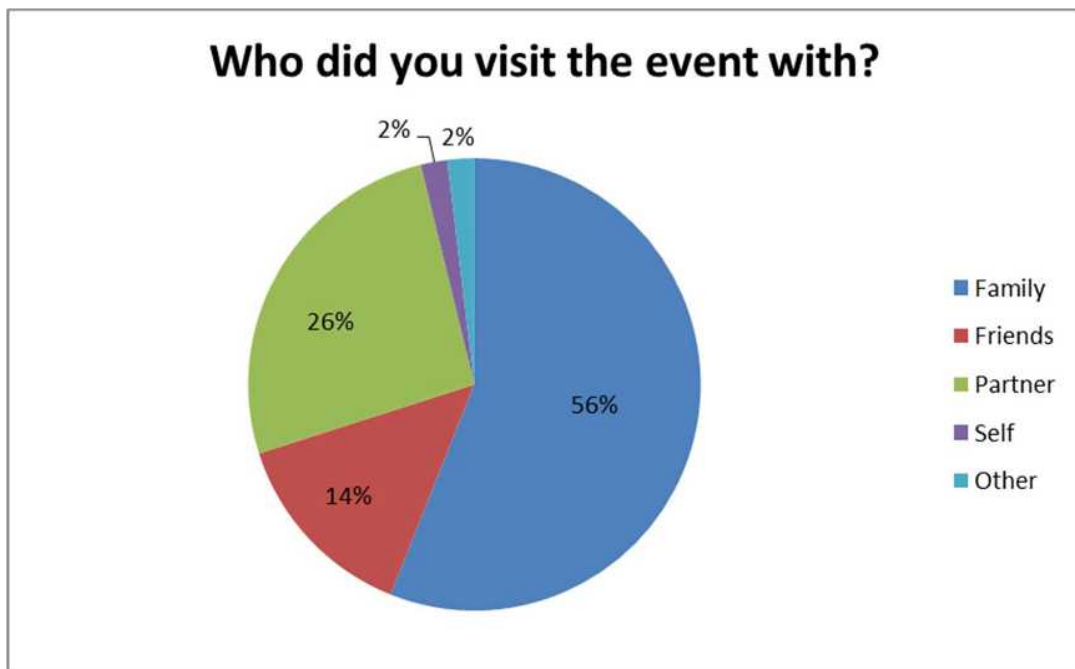
The above graph shows the percentage of locations of visitors to the event, 26% of users as shown to have come from outwith Perth & Kinross postcodes.

Breakdown of Audience Attending



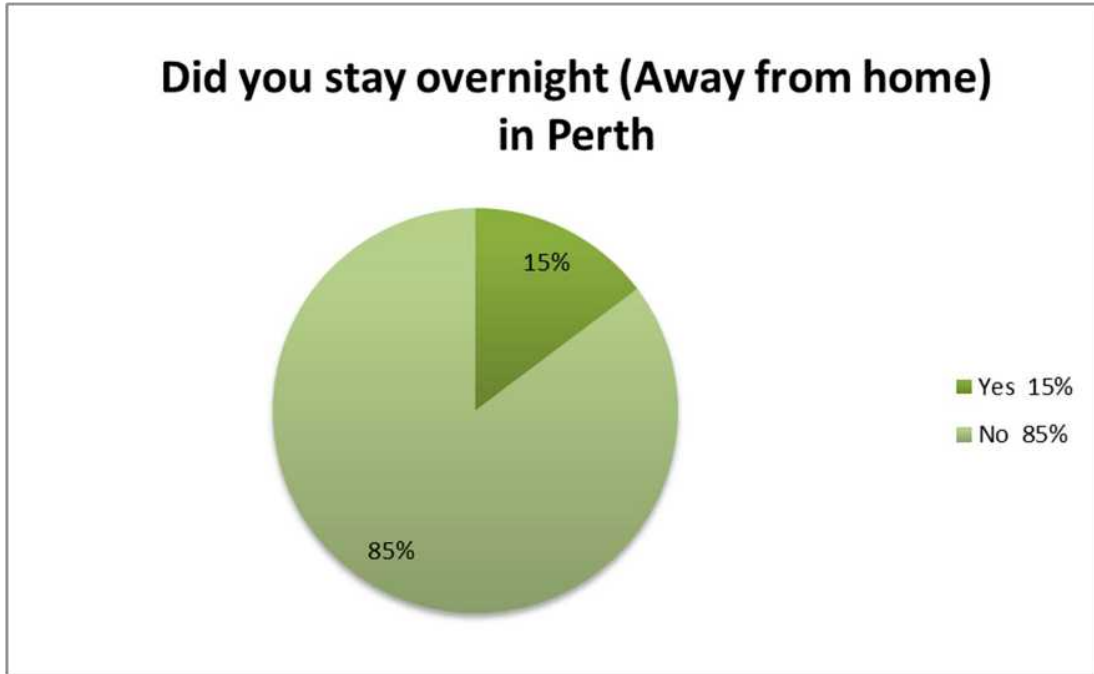
Respondents were asked what was the breakdown of their group was in relation to Adult & Child. 63% of visitors were shown as adults and 37% as children. This equates to 33,705 adults with 19,795 children.

Visitor Audience Profile



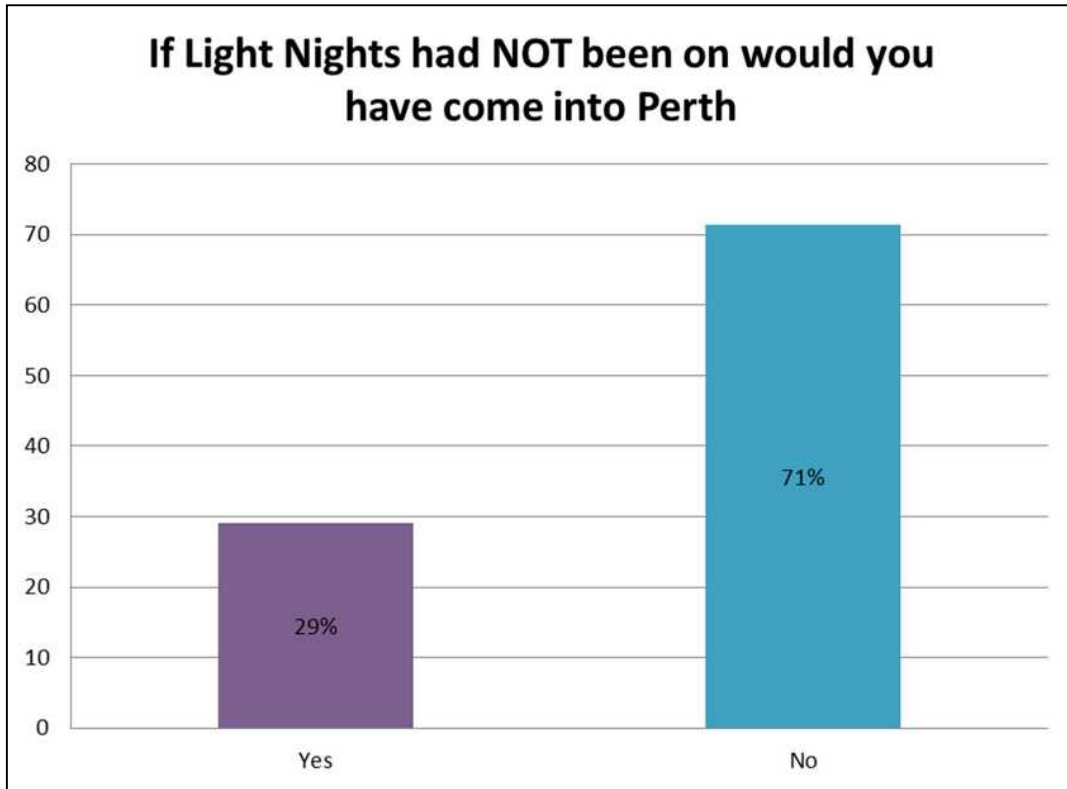
The majority of attendees, 56%, are shown as attending as a family group with 26% attending with a partner and 14% with friends.

Visitor Audience Profile



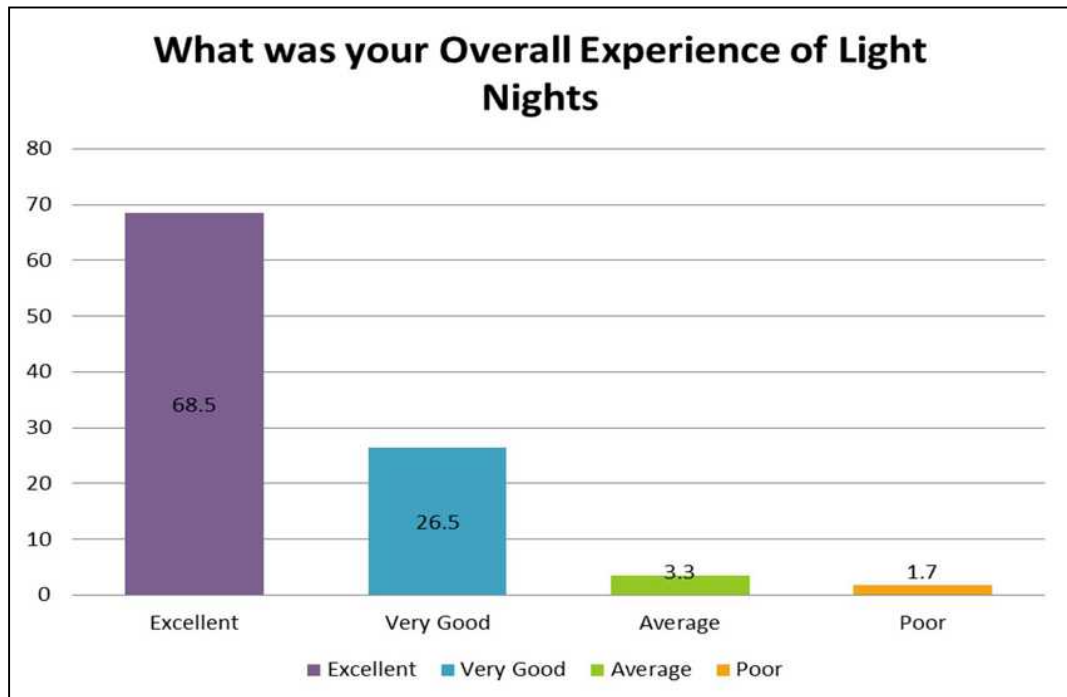
Visitors were asked if they had stayed overnight when attending Light Nights, 15% had indicated that they had stayed overnight although this is reduced to 6.9% of users who paid stay in Perth.

Visitor Experience



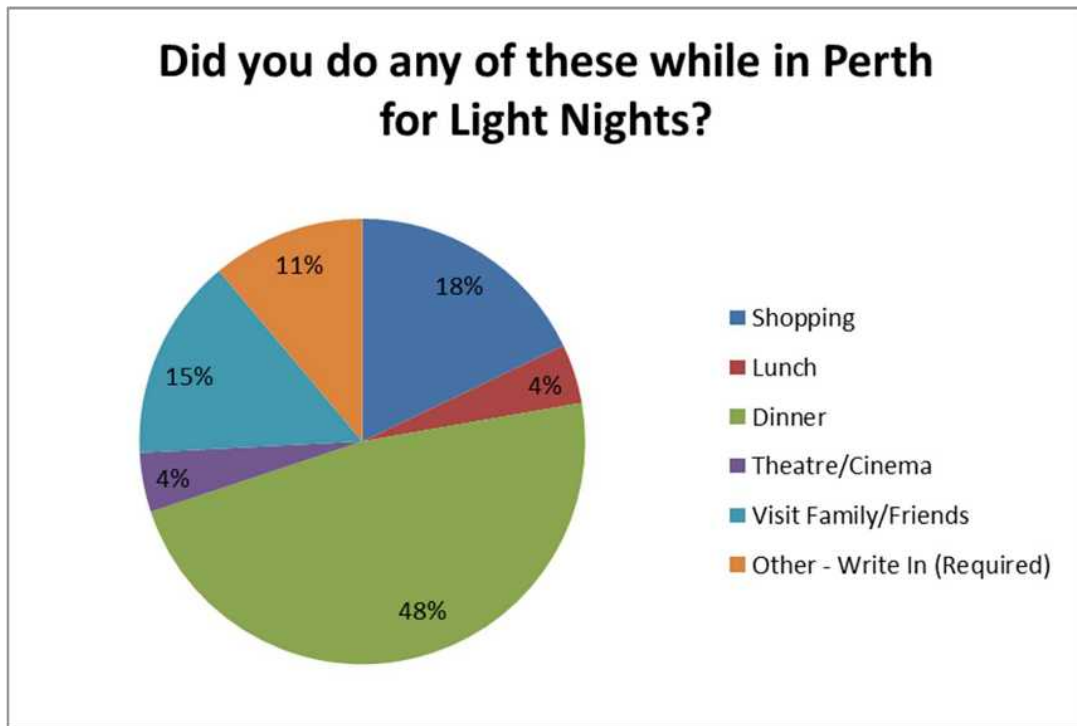
Visitors were asked if they would have come into Perth of that evening had Perth Light Nights NOT been on. 71% of respondents said they would not have come into Perth.

Visitor Experience



95% of visitors rated Perth Light nights as Very Good or Excellent.

Visitor Experience



48% of respondents listed going for dinner which was an increase from 33% the previous year. 4% for lunch is identical to 2017. 18% listed shopping which was an increase from 8% the previous year. 50% of the respondents within 'other' noted that they did nothing else while being in for Perth Light Nights.

Riverside Light Nights 2018 survey results to Economic Impact:

Of those surveyed 63% are shown as adults in attendance, 37% as children.

53,500 visitors total (subtracting children @37%) = 33,705 adults attending

Overnight Accommodation Visitor Spend

49/704 visitors stayed overnight = 6.9% of those questioned.

Total spend = £4110/49 = £83.88 per person.

6.9% of 33,705 = 2326 total overnight visitors for event.

2326 x £83.88 = **£195,104.88** total spend on accommodation.

It is unknown exactly how many visitors stayed over specifically for light nights. A figure of 29% has been shown overall for all visitors who would have come to Perth irrespective of Light Nights being on however for the purpose of this report it is recommended to increase this percentage to 60%* and any future assessments to be re-worded to gain a better evaluation of the results. (*in line with deadweight and displacement figures)

Food & Drink Spend

£0.00	87 visitors = £0.00	
£1.00-£9.99	265 visitors = £516.75	(£1.95 average per visitor)
£10.00 - £24.99	204 visitors = £2990.64	(£14.66 average per visitor)
£25.00 - £49.99	118 visitors = £3034.96	(£25.72 average per visitor)
£50.00 - £99.99	20 visitors = £1500	(£75.00 average per visitor)
£100+	10 visitors = £1000	(£100 average per visitor)
Total	£9042.35/ 704 (total questioned) = £12.84 average per visitor	

33,705 adults x £12.84 = **£432,772.20** total spend on food & drink.

Shopping Spend

£0.00	388 visitors = £0.00	
£1.00-£9.99	32 visitors = £158.08	(£4.94 average per visitor)
£10.00 - £24.99	126 visitors = £2085.30	(£16.55 average per visitor)
£25.00 - £49.99	118 visitors = £4301.10	(£36.45 average per visitor)
£50.00 - £99.99	35 visitors = £1750	(£50.00 average per visitor)
£100+	5 visitors = £500	(£100 average per visitor)
Total	£8794.48 / 704 (total questioned) = £12.49 average per visitor	

33,705 adults x £12.49 = **£420,975.45** total spend on shopping

Travel Spend

£0.00	260 visitors = £0.00	
£1.00-£9.99	267 visitors = £1054.65	(£3.95 average per visitor)
£10.00 - £24.99	127 visitors = £1739.90	(£13.70 average per visitor)

£25.00 - £49.99	40 visitors = £1090 (£27.25 average per visitor)
£50.00 - £99.99	9 visitors = £600 (£50.00 average per visitor)
£100+	1 visitors = £100 (£100 average per visitor)
Total	£4584.55 / 704 (total questioned) = £6.51 average per visitor

33,705 adults x £6.51 = **£219,419.55** total spend on travel.

Entertainment Spend

£0.00	477 visitors = £0.00
£1.00-£9.99	78 visitors = £397.02 (£5.09 average per visitor)
£10.00 - £24.99	107 visitors = £1500.14 (£14.02 average per visitor)
£25.00 - £49.99	40 visitors = £1123.60 (£28.09 average per visitor)
£50.00 - £99.99	1 visitor = £50 (£50.00 average per visitor)
£100+	1 visitor = £100 (£100 average per visitor)
Total	£3170.76 / 704 (total questioned) = £4.50 average per visitor

33,705 adults x £4.50 = **£151,672.50** total spend on entertainment.

Other Spend (Only asked in one Questionnaire so results adjusted to reflect)

£0.00	164 visitors = £0.00
£1.00-£9.99	43 visitors = £171.14 (£3.98 average per visitor)
£10.00 - £24.99	17 visitors = £250.41 (£14.73 average per visitor)
£25.00 - £49.99	8 visitors = £235.04 (£29.38 average per visitor)
£50.00 - £99.99	3 visitors = £150.00 (£50.00 average per visitor)
£100+	3 visitors = £300.00 (£100 average per visitor)
Total	£1106.59 / 238 (total questioned) = £4.65 average per visitor

33,705 adults x £4.65 = **£156,728.25** total spend on other.

Gross Economic impact based on spending profile £1,576,672.83

The gross visitor expenditure needs to be transformed into net spending i.e., only the spending which is additional – brought about by the event itself, on top of the expenditure which would have taken place in Perth anyway. This takes into account reductions in gross expenditure (deadweight and displacement along with increases through multiplier effects.

Perth Riverside Lights 2018							
Spend Area	% visitors	Gross Spend	% reduction for non event stays*	Deadweight Loss	Displacement Loss	Spend Reduction	Total Net Spend
Accommodation	100%	£195,104.88	60%			£117,062.93	£78,041.95
Food & Drink		£432,772.20					
Perthshire Residents	72%	£311,595.98		39.5%	21.5%	£190,073.55	£121,522.43
Visitors outwith Perthshire	28%	£87,246.88					£87,246.88
Shopping		£420,975.45					
Perthshire Residents	72%	£303,102.32		39.5%	21.5%	£184,892.42	£118,209.91
Visitors outwith Perthshire	28%	£84,868.65					£84,868.65
Travel		£219,419.55					
Perthshire Residents	72%	£157,982.08		39.5%	21.5%	£96,369.07	£61,613.01
Visitors outwith Perthshire	28%	£44,234.98					£44,234.98
Entertainment		£151,672.50					
Perthshire Residents	72%	£109,204.20		39.5%	21.5%	£66,614.56	£42,589.64
Visitors outwith Perthshire	28%	£30,577.18					£30,577.18
Other		£156,728.25					
Perthshire Residents	72%	£112,844.34		39.5%	21.5%	£68,835.05	£44,009.29
Visitors outwith Perthshire	28%	£31,596.42					£31,596.42
	Total (s)	£1,576,672.83				£723,847.57	£744,510.33
Economic impact of net spend from visitors outwith PKC boundary							£356,566.05
Economic impact of net spend from visitors in PKC boundary							£387,944.28
Total Economic impact of net spend							£744,510.33
1.25 multiplier for further economic benefit as money circulates local economy							£930,637.91

* A 60% reduction to accommodation spend has been allocated as exact users staying specifically for Light Nights is unknown from data

Deadweight¹ is defined as the proportion of total outcomes that would have been secured anyway without the intervention in question. Riverside Nights was a free event, suggesting that at least some of the spending would have happened anyway in the course of people being in Perth on a 'normal' day. However, Riverside Light Nights would have likely encouraged them to spend longer going around Perth, and encouraged more expenditure on, for example, food and drink outside normal food shopping than would have been the case, in particular in relation to the evening economy. Balancing these divergent tendencies suggests a figure of around 40% - near the average – is appropriate.

Displacement² is the proportion of total outcomes that are reduced elsewhere in the target area typically among other businesses – i.e., 'cannibalising' of spending elsewhere in Perth, rather than being additional in the true sense.

The multiplier³ represents the extent to which £1 of spending generates further economic benefits as it circulates in the local economy – i.e., the 'knock-on' effects whereby, for example, 20% of an employee's wages would be spent locally, of which a further 20% of those employees' wages would be spent locally and so on... This figure is taken to be 1.25 for a sub-regional multiplier.

In summary the economic impact of Riverside Nights is estimated at **£744,510.33** when transformed into net spending.

£356,566.05 is estimated to have been generated by visitors from non-Perth & Kinross Council post codes.

£387,944.28 is estimated to have been generated from visitors from within Perth & Kinross post codes.

Including the 1.25 sub-regional multiplier it is estimated the total net worth of the event to be **£930,637.91**.

Reference

¹ *BIS OCCASIONAL PAPER NO. 1 Research to improve the assessment of additionality (page 14. Table 3.1: Deadweight at the sub regional level)*

² *BIS OCCASIONAL PAPER NO. 1 Research to improve the assessment of additionality (page 18. Table 4.1: Displacement at the sub regional level)*

³ *BIS OCCASIONAL PAPER NO. 1 Research to improve the assessment of additionality (page 27. Table 7.1: Displacement at the sub regional level)*

The value of this study is that it presents evidence from many studies and quotes average or typical values for each estimate and does so at a sub-regional scale.

Visitor Comments:

We Travelled to Perth 3 times to visit the light nights with Friends and family. Love visiting and hope it continues next year.

Absolutely amazing. My little one loved it so much, as did we! We attended the superhero theme, and went round it twice we found it so good. Tonight we are attending the yellow brick road, as it's my little boy's favourite film & I'm sure we will enjoy this just as much! Thank you so much for providing this free entertainment, great for the community!

This is a great attraction and brings many visitors into the city centre. The different themes ensure we will return again.

This was a great experience and so well organised. Great to spend time with family without the usual expense. More of these events would be welcomed in more cities. Well done to everyone involved in bringing these nights together.

I thought it was a fantastic event that is great for kids and adults. It was also nice to go somewhere that allows dogs as well as we get put off to going to things as we don't want to leave our dog for too long on her own

Brilliant event highly recommend and much better than Enchanted Forest as theme changes and easier to Access with being in Perth definitely a family fun outing that caters for all ages.

The event was great and as a local resident it is great to see families coming out with Perth to this and spending money in our area. I recommended this to friends in fife and a good number of them came through and loved it! The themes are great and a few additional ones to last year which has been fab!

Brilliant. Suitable for every age. Every member of staff we came across was happy and helpful. We've been to two themes so far and both amazing. One was raining v heavily and we honestly didn't notice as having so much fun. Really well thought of and brilliant for Perth.

I went with my husband to the Alice in Wonderland theme & thoroughly enjoyed. I'm so glad Perth is finally doing something (anything!) to get people back into the town - I hope visitors to the city will come back when the light show finishes for other attractions

Had a fantastic night and it's amazing that it is free! Have actually been through twice already and am so impressed with the differences and the detail each time! Have recommended to so many people! Only wish Dundee did something similar!

Thank you to everyone who played a part in organising this wonderful event.

The lights were amazing and the staff/performers were great at interacting with the public.

We thought it was even better this year than last year. The sheer variety was amazing! Loved in particular the characters, the face painting, the live band and poets, the food and drink stalls, the photo booth

Was really good event again. So much more than last year. We tried to do it all but missed a couple. So there was something for everyone. Loved the photo booth again this year. The live band one valentines was excellent. It's a good event to get people out of their houses for fresh air and exercise on the cold winters night. Something similar but less work would be great for the end of the year as it gets people out and it's for your health and wellbeing.

Not a sympathy vote but recently having going through a separation, it was so nice to bring my girls out to this in the evenings as a distraction and to also see their faces light up. My eldest is so keen to see every theme so we are eager to do so and will definitely make that effort. The joy when they see the characters and they were completely mesmerised during the wonderland tea party performance. It's so magical and they even just loved watching the lights "touching the clouds" so every little detail, no matter how small was actually appealing to them. The yellow brick road encouraged us to go home and watch the movie together all snuggled up. My youngest had never seen it before and now I have to put it on all the time so it's nice to introduce classics to them. Thank you for providing these experiences which allow us to go out at night as our little family and bring home lovely memories.

Amazing displays and at a time when usually nothing happens. Definitely cheers up our cold winter months

Enjoyed visit. Live in Perth city centre so only a walk across the bridge but worthwhile as viewed it over the river each night. Hope to go along for the Chinese New Year event.

Absolutely fantastic event put on, safely routed, friendly staff and good selection of food/drink stalls

Thought it very well done and happily come back next year even happy pay a donation next time

Absolutely fantastic, next time we would plan an evening to include shopping and a meal.

Perth has pulled out all the stops for this event over winter.. it gets families friends etc. together. It's a great event and should continue to carry on.

This event was absolutely amazing. The superheroes night will stay in my 7 year olds memories forever. Mine also , the whole event was such good fun and I hope we can have it again next year . Thank you

A wonderful event. I love that the theme changes every few nights so there is something for everyone to enjoy.

A truly fantastic evening. Was so lovely to see & follow the parade this evening before we reached the riverside walk. Kids were totally mesmerised by it all. Thank you to everyone who had put this on.