Grangemouth Spatial Vision & Town Centre Masterplan

Appendices October 2025 **Falkirk Council**

Austin-Smith:Lord





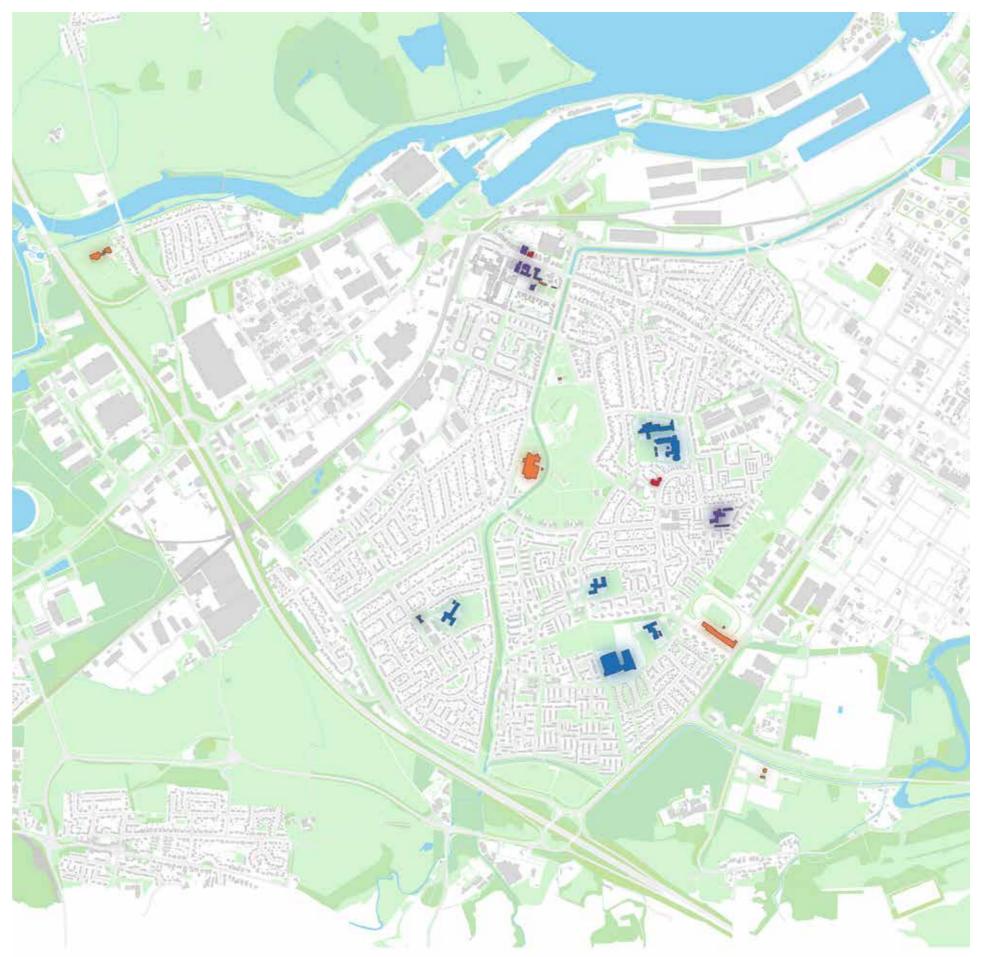
Appendix 01 - One Public Estate

Analysis / mapping

As per the brief, a key principle of supporting and improving communities is the co-location of public sector organisations and the delivery of integrated collaborative services wherever possible. This approach has been delivered in a number of local authority areas with positive outcomes for the performance and sustaining of local based services with greater customer access and general satisfaction. In addition, it has enabled innovative service delivery and both the rationalisation and modernisation of assets.

In Grangemouth, this principle offers a significant opportunity to consolidate services in the Town Centre, creating a vibrant civic hub that enhances access, supports footfall, and makes more efficient use of public buildings. Co-locating services such as health, education, employability, and community support into a shared facility — potentially through the rejuvenation of existing Town Centre assets — can act as a catalyst for wider regeneration. This approach also supports collaborative working between agencies and presents a clear signal of long-term public sector commitment to Grangemouth's centre.

However, it is essential that this strategy does not come at the expense of the neighbourhood-based facilities which continue to serve as vital anchors within their respective communities. Local centres in areas such as Kersiebank, Bowhouse, and Charlotte Dundas support everyday needs, foster social cohesion, and provide accessible services for residents who may face mobility or transport barriers. A balanced model is therefore required — one that strengthens the Town Centre while preserving and investing in neighbourhood provision. This dual approach will ensure that the benefits of rationalisation are equitably distributed and rooted in place-based needs across Grangemouth.

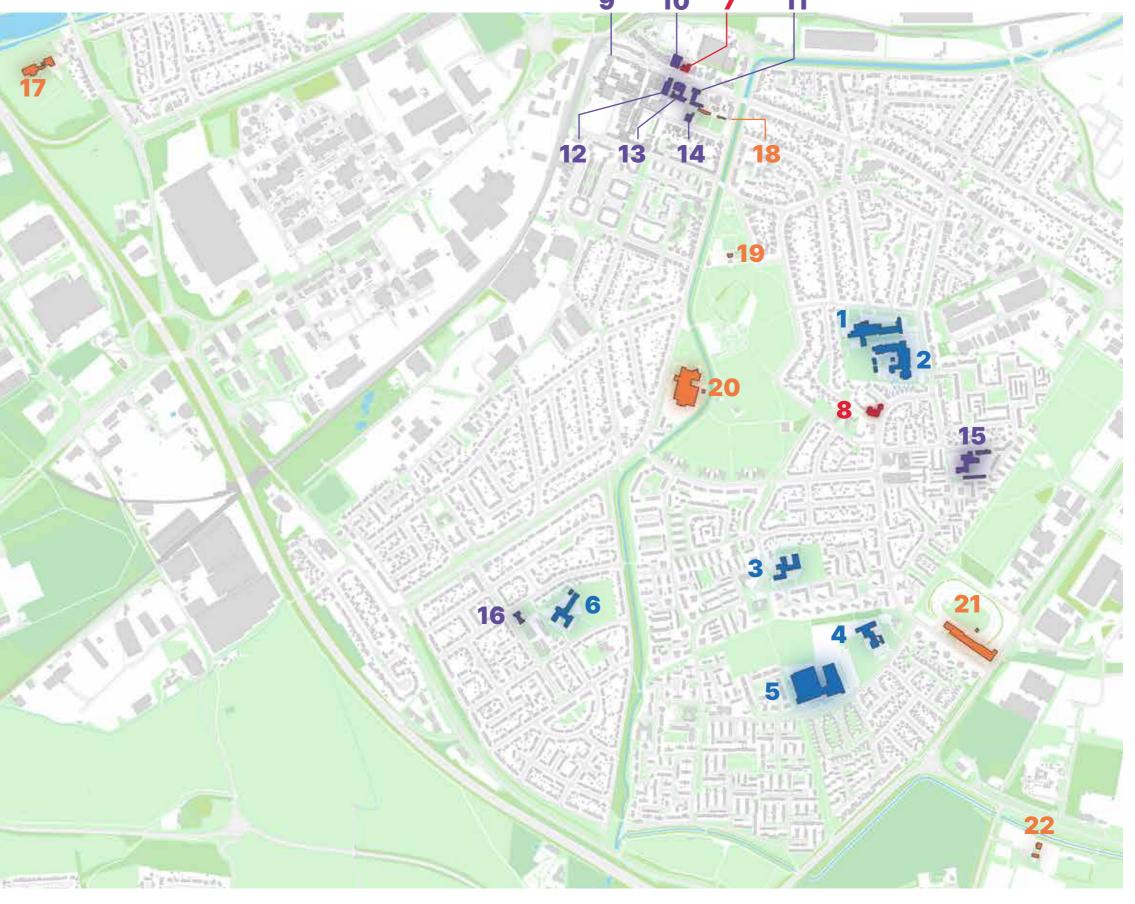


Grangemouth Public Assets

Appendix 01 – One Public Estate



Falkirk Council - Grangemouth Spatial Vision & Town Centre Masterplan



Appendix 01 – One Public Estate

A list of public assets for Grangemouth is as follows:

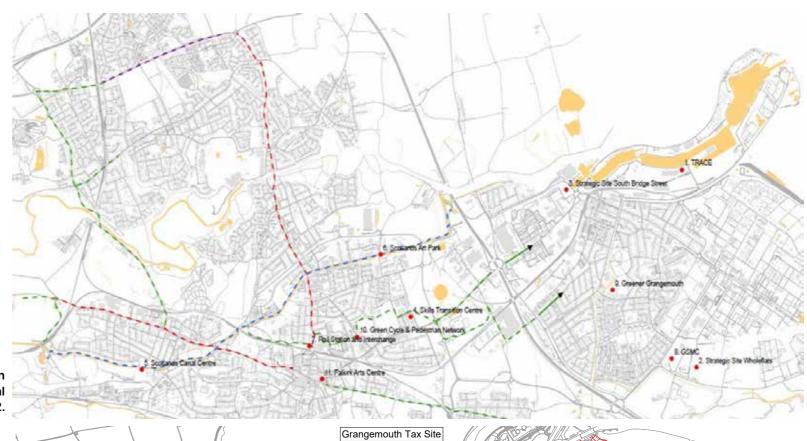
	Education	
1	Moray Primary School	A primary school serving the community, offering foundational education for children.
2	Carrongrange High School	A purpose-built facility for special education, tailored to support children with additional needs.
3	Sacred Heart R.C. Primary School	A Roman Catholic primary school offering faith-based education alongside the standard curriculum.
4	Bowhouse Primary School	Another primary education provider in Grangemouth, supporting local families.
5	Grangemouth High School	A secondary school providing education for local students, with sports facilities available for community use.
6	Beancross Primary School	A local primary school with active participation in community and extracurricular programs.
	Healthcare	
7	Bo'ness Road Medical Practice:	A general practice providing consultations and routine medical care.
8	Kersiebank Medical Practice	A medical practice offering healthcare services to local residents.
	Civic	
9	Grangemouth Post Office (York Square)	A central post office offering postal services.
10	Grangemouth Town Hall	A multi-purpose venue used for public meetings, cultural events, and private functions.
11	Grangemouth Police Station	A local police station offering law enforcement and public safety services.
12	Grangemouth Library	A community library providing books, digital resources, and public access to computers, along with hosting community programs.
13	Grangemouth Municipal Chambers	A council offices building at the heart of Grangemouth Town Centre.
14	Talbot House	A community centre that hosts lunch clubs twice weekly, focusing on supporting elderly and vulnerable residents.
15	Kersiebank Community Education Centre & Dundas Resource Centre	A hub for community events, classes, and youth activities, supporting various local initiatives. Dundas Resource Centre is a NHS Day Service for people with Learning Disabilities and also Physical Disabilities. The service provides day opportunities for service users as well as community based activities.
16	Beancross & Newlands Community Centre	A hub for community events, classes, and youth activities, supporting various local initiatives.
	Leisure	
17	Grangemouth Stags Rugby Club	Grangemouth Stags is a rugby club based in Grangemouth, playing at Glensburgh Park.
18	Grangemouth Bowling Club	Grangemouth Bowling Club, established in 1820, is located on Talbot Street in Grangemouth.
19	Zetland Park Bowling Club	Zetland Bowling Club, founded in 1926, is located within Zetland Park in Grangemouth.
20	Grangemouth Sports Complex:	A key hub for sports and recreation, featuring a swimming pool, gym, multi-purpose sports halls, and fitness classes.
21	Grangemouth Stadium:	A premier athletics venue in Scotland, offering facilities for track and field sports, events, and specialized training for athletes.
22	Galaxy Sports Little Kerse	Galaxy Sports Little Kerse is a football facility in Grangemouth



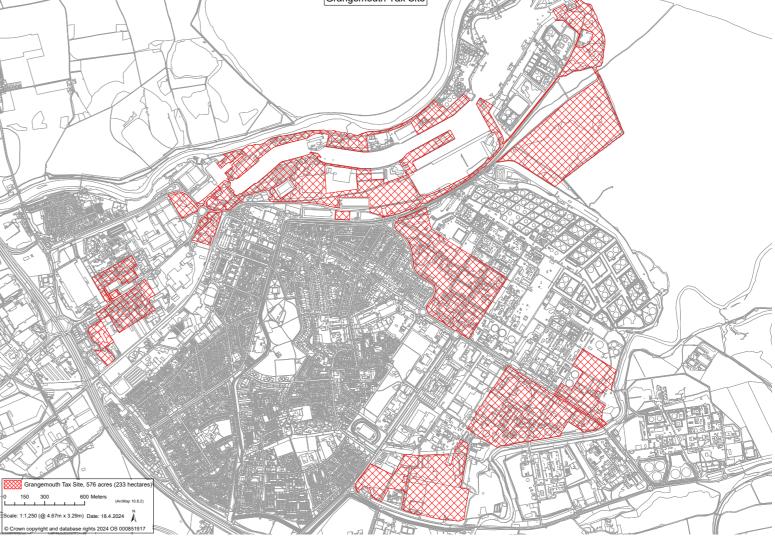
Appendix 02 - Influencing Factors -Projects, Programme and Policies

The following plans policies strategies are influencing Grangemouth's future and are considered in more detail in the following pages

- Falkirk Council's Active Travel Strategy (2023)
- Falkirk Council's Local Transport Strategy (2023)
- Falkirk Council's Parking Strategy (to be published in 2025)
- **Grangemouth Community Action Plan**
- Local Development Plan
- Falkirk / Grangemouth Growth Deal
- Greener Grangemouth programme in contributing to Net Zero Just Transition alongside the Forth Green Freeport,
- Flood Protection Scheme,
- the Grangemouth Investment Zone (re NPF4),
- the role of Grangemouth Future Industry Board (GFIB), alongside Falkirk Council, SFT and industry partners.
- HSE zones



Growth Deal Location Plan from Falkirk Growth Deal Appendices 1 & 2.



Grangemouth Tax Sites

Appendix 02 - Influencing Factors - Grangemouth Community Action Plan (2021-2030)

The Grangemouth Community Action Plan, launched in February 2022, sets out a shared vision for the town, reflecting the priorities of its residents to create a stronger, more inclusive, and sustainable community. At its heart is the ambition to address the challenges facing Grangemouth while building on its strengths. Key themes include improving the town's economy, enhancing quality of life, and fostering greater community ownership and involvement in decision-making. The plan highlights the importance of creating a place where people can live well, work locally, and feel connected to their environment and neighbours.

A major focus of the plan is the revitalisation of Grangemouth's Town Centre, which has experienced long-term decline. The plan calls for a multi-purpose Town Centre that blends retail, community services, and spaces for culture and leisure, making it a hub for local life. The vision also emphasises the need to diversify housing options, improving quality and availability to stabilise the population and support families, while enhancing the appearance and liveability of residential areas.

Another critical priority is enhancing Grangemouth's environment and infrastructure. The plan advocates for expanded green and blue spaces, better flood management, and active travel connections to reduce car dependency and promote health and well-being. Reconnecting Grangemouth to its waterfront and surrounding attractions, such as Zetland Park and the Helix, is central to this effort. These changes aim to make Grangemouth a greener, more accessible, and more resilient town that offers residents and visitors alike an improved quality of life.

Community engagement and empowerment underpin the action plan, recognising the importance of local voices in shaping Grangemouth's future. While the community is highly engaged and committed, the plan identifies the need for increased resources, capacity, and leadership development to sustain this energy over time. By addressing inequalities, improving access to services, and fostering stronger connections between the town and its industrial and natural surroundings, the plan envisions a thriving, inclusive, and forward-looking Grangemouth.



Community Action Plan points of interest

The strategic town-wide focus of the Community Action Plan is due to be complemented by more detailed neighbourhood-level community action planning from 2025 onwards.

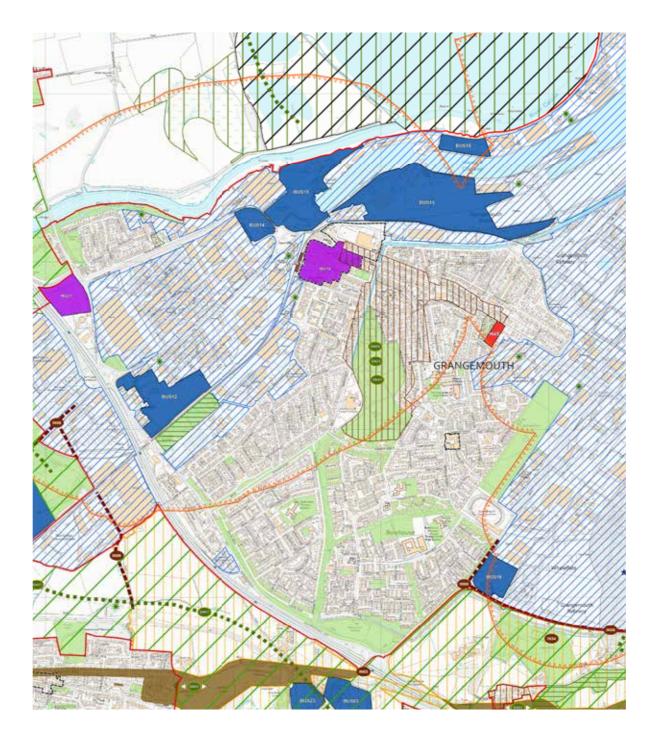
Appendix 02 -Influencing Factors - Local Development Plan 2

The Falkirk Local Development Plan (LDP2, adopted 2020) outlines a strategic framework for development across the Falkirk area, with a specific focus on supporting Grangemouth's role as a key economic hub while addressing the challenges the town faces. It recognises Grangemouth's significance as Scotland's industrial powerhouse, centred on its petrochemical complex and port, while aiming to balance industrial activity with the needs of residents and the environment.

A major focus of the LDP is on improving Grangemouth's infrastructure, particularly through enhanced flood defences to protect the town and its industries from climate-related risks. The plan also prioritises the development of active travel networks to better connect Grangemouth with Falkirk, Glensburgh, and surrounding areas, reducing car dependency and improving accessibility. Additionally, the LDP aims to integrate blue-green infrastructure to strengthen links between the town, its waterfront, and nearby natural and recreational assets like Zetland Park, the Helix, and the Carron River.

The LDP supports regeneration efforts in Grangemouth to revitalise the Town Centre, which is recognised as being in decline. Proposals include the creation of a mixed-use Town Centre that incorporates retail, community spaces, and cultural facilities, making it a vibrant focal point for residents and visitors. It also highlights the need to diversify the local housing stock to stabilise the population, attract families, and address issues of transience while improving the quality of residential areas.

Addressing the relationship between industry and town life is a critical aspect of the LDP's vision for Grangemouth. It seeks to mitigate the negative impacts of industrial activity on the town, such as traffic, air quality, and incompatible land uses, while fostering synergies between industry and the community. This includes ensuring local people benefit more directly from Grangemouth's economic strengths, through job creation, skills training, and sustainable development that supports both the town and its industries.



LDP: Map 5 - Grangemouth, Polmont Area, California, Shieldhill, Skinflats and Whitecross

FALKIRK Local Development Plan 2 August 2020 Kev Falkirk Council Boundary Place & Environment - Historic Environment Antonine Wall World Heritage Site (PE05) Antonine Wall World Heritage Site Buffer Zone (PE05) Conservation Areas (PE08) \Box Areas of Townscape Value (PE09) \square Inventory of Gardens and Designed Landscapes (PE10) Battlefield Sites (PE11) Canals (PE12) Place & Environment - Natural Environment Urban/Village Limit (PE14) Green Belt (PE15) Open Space (PE16) Local Landscape Area (PE18) Special Protection Area (PE19) Site of Special Scientific Interest (PE19) Wildlife Sites (PE19) Site of Importance for Nature Conservation (PE19) Local Nature Reserve (PE19) Geodiversity Sites (PE19) Tree Preservation Order (PE20) Jobs & Economy - Business Core Business Sites (JE02) Business Areas with Potential for Redevelopment (JE03) Pipeline Consultation Zone (JE06) Major Hazard Consultation Zone (JE06) Town and Local Centre Boundaries (JE07) See Appendix 6 for Grangemouth Investment Zone boundary Infrastructure and Resources - Waste Waste Management Facilities (IR17) Proposals/Opportunities Housing (H) Business (BUS) Infrastructure (IN)

Green and Blue Network (GN)

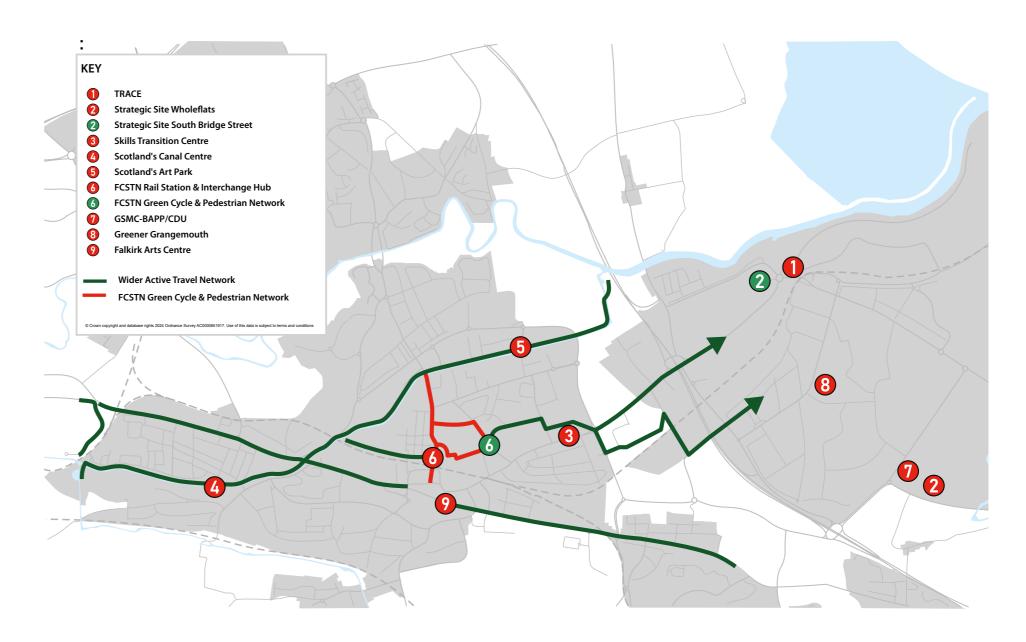
Appendix 02 -Influencing Factors - Falkirk/ Grangemouth Growth Deal

The Falkirk Grangemouth Growth Deal is a transformative investment programme aimed at driving sustainable economic growth in the Falkirk and Grangemouth area. With a focus on innovation, resilience, and community benefit, the deal brings together funding from the UK and Scottish Governments, Falkirk Council, and private sector partners. Its primary aim is to unlock Grangemouth's potential as a major industrial and economic hub while addressing long-standing challenges such as environmental sustainability, infrastructure, and local inequalities.

Central to the Growth Deal is the focus on Grangemouth's industrial base, particularly its petrochemical complex and port, to enhance its competitiveness and sustainability. Key initiatives include the development of low-carbon technologies and infrastructure, such as hydrogen production and carbon capture, to support Scotland's transition to a net-zero economy. These projects will not only secure the future of industry in Grangemouth but also create new opportunities for innovation and skilled employment.

Community well-being and inclusion are at the heart of the Growth Deal's ambitions. Alongside economic and environmental initiatives, the deal seeks to address social inequalities by fostering skills development, creating new job opportunities, and improving access to services and amenities. By combining industrial innovation with local regeneration, the Falkirk Grangemouth Growth Deal envisions a more sustainable, resilient, and inclusive future for the area.

https://www.gov.uk/government/news/100m-falkirk-and-grangemouth-growth-deal-signed



Future energy related projects - as included in the Grangemouth Growth Deal 2024

Appendix 02 -Influencing Factors - Greener Grangemouth

Greener Grangemouth is a programme of coordinated interventions to enhance the quality of life for local people and promote a 'Just Transition' towards Net Zero ambitions.

Grangemouth's Just Transition places community wellbeing at its core, aiming to create a more inclusive, resilient, and sustainable town. By integrating local infrastructure with wellbeing support and essential services, the initiative seeks to make daily life easier for residents. This includes colocating services, enhancing accessibility, and ensuring that local needs are met efficiently and effectively.

The transition also prioritises accessible opportunities by fostering partnerships that focus on skills development, employability, and community wealth building. Through capacity-building initiatives and collaboration with local organisations and industries, the aim is to equip residents with the skills and opportunities needed to benefit from Grangemouth's economic and industrial strengths.

Reimagining the Town Centre is central to the vision, ensuring that it becomes a hub of local resilience. By repurposing assets, developing partnerships, and improving public spaces, the goal is to create a vibrant, mixed-use Town Centre that serves as a focal point for culture, retail, services, and community life.

Finally, the Just Transition aims to make net zero ambitions relevant and equitable by ensuring local participation and benefits. This involves creating opportunities for the community to engage in sustainable initiatives, ensuring they directly experience the economic and environmental benefits of Grangemouth's transition to a greener future.

The Grangemouth Transport Study - Initial Appraisal Case for Change (2024) has explored some of the key transport related opportunities identified, which are included as part of the long list of options.

Should the Transport Study progress in future, these options will be explored further as part of a preliminary and detailed appraisal process.



Greener Grangemouth Community Workshop, March 2023

The investment goal for Greener Grangemouth is to unlock, coordinate and accelerate targeted local change which:

- Makes life easier: creating accessible, flexible spaces and digital infrastructures which support communities improve healthy life expectancy, reduce child poverty and enable young people to maximise their capabilities
- Makes opportunities accessible: creating safe places and routes and supporting community capacity to influence, adapt and benefit from change.
- Makes the Town Centre work: supporting change of uses and improving the attractiveness of the Town Centre as a place to be supporting community wealth and economic resilience
- Makes net zero relevant: creating and retrofitting spaces for living, services, skills and support which help communities respond locally to the climate change emergency.

Appendix 02 -Influencing Factors - Flood Protection Scheme



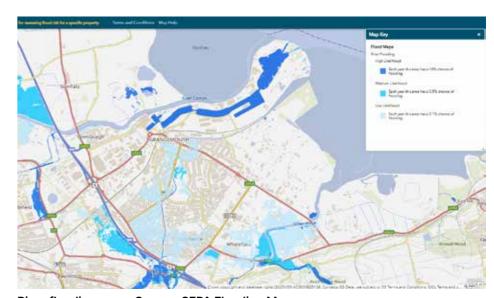
Coastal flooding map - Source: SEPA Flooding Maps

The Scottish Environment Protection Agency (SEPA) has developed future flood maps to assess how climate change may impact flood risks across Scotland, including areas like Grangemouth. These maps are based on projections for the late 21st century and consider various sources of flooding: river, coastal, and surface water. Details of the methodology, data sources and scenarios modelled is available via SEPA's website.

In Grangemouth, situated near the River Carron, River Avon, Grange Burn, and the Firth of Forth, the future flood maps indicate potential increases in flood extents and depths due to climate change. The maps suggest that areas currently at risk may experience more frequent and severe flooding events, while regions previously considered low-risk could become vulnerable. These projections are crucial for informing long-term flood risk management and planning decisions in the area.



Surface water and small water courses flooding map - Source: SEPA Flooding Maps



River flooding map - Source: SEPA Flooding Maps



Future flood map

Appendix 02 -Influencing Factors - Flood Protection Scheme

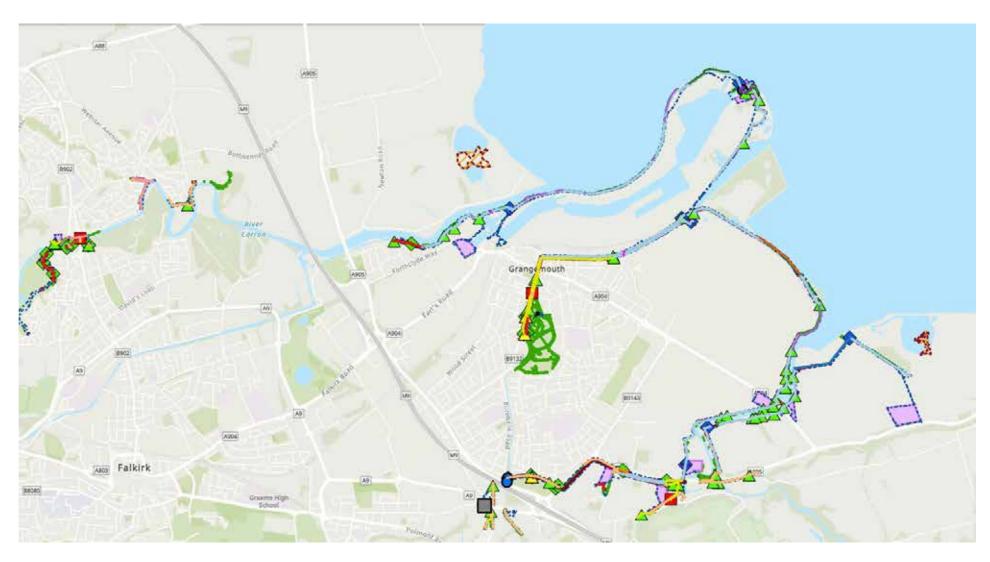
The Grangemouth Flood Protection Scheme is Scotland's largest flood defence initiative, designed to safeguard the town of Grangemouth and its surrounding communities, including Wholeflats, Glensburgh, Langlees, Carron, Carronshore, and parts of Camelon. The scheme supports the aims of National Planning Framework 4 (NPF4), particularly Policy 22 (Flood Risk and Water Management), by enhancing resilience to current and future climate risks through sustainable infrastructure investment.

The project aims to protect approximately 2,760 residential properties, 1,200 non-residential properties, and 23 kilometres of roads from the increasing risks of flooding due to rising sea levels in the Firth of Forth and greater rainfall affecting local rivers. By addressing these threats, the scheme contributes directly to NPF4's spatial strategy of promoting climate adaptation and protecting communities from climate change impacts.

The proposed defences extend across a range of locations, including the River Avon from Inveravon to its confluence with the Firth of Forth, the River Carron from the A9 crossing at Larbert to its estuary, and several local burns such as Westquarter Burn, Chapel Burn, Millhall Burn, and Grange Burn. In total, the scheme will deliver approximately 28 kilometres of new and upgraded flood protection infrastructure, consistent with NPF4's national development priorities for sustainable, resilient places and vital infrastructure networks.

In May 2024, Falkirk Council formally notified approximately 10,000 residents and businesses about the proposed scheme, providing access to detailed plans and environmental impact assessments in accordance with statutory consultation requirements. The consultation period closed on 16 June 2024, with a small number of objections submitted—primarily related to visual impacts and potential construction disruption. These matters are being considered in line with the plan-led approach and place-based principles outlined in NPF4.

The estimated cost of the scheme is between £450 million and £670 million, reflecting the scale and strategic importance of the project. It represents a significant investment in long-term resilience and supports NPF4's national outcomes related to sustainability, wellbeing, and climate adaptation.



Falkirk Flood Protection Map

On 24 January 2025, Falkirk Council made a preliminary decision to confirm the scheme without modifications and proceed to the next stage of delivery. Scottish Ministers have been notified, and a decision on whether to hold a Public Local Inquiry (PLI) or Local Hearing is expected in spring 2025.

Appendix 02 - Influencing Factors - Grangemouth Investment Zone (re NPF4)

The Grangemouth Investment Zone is a strategic initiative highlighted in Scotland's National Planning Framework 4 (NPF4), aiming to leverage the area's established strengths in the chemicals industry and its strategic assets, including the port and rail connections. The initiative seeks to foster innovative industrial development while addressing environmental concerns, given that Grangemouth is the highest single source of industrial emissions in Scotland. Continued investment in this zone is deemed essential for the nation's future resilience and manufacturing base.

Plans for the Grangemouth Investment Zone focus on reducing emissions and promoting sustainable practices within the industrial sector. This includes exploring low-carbon technologies and enhancing infrastructure to support a transition to a greener economy. The initiative also emphasizes the importance of integrating the industrial activities with the surrounding communities, ensuring that development contributes positively to local well-being and environmental quality.

By building on Grangemouth's existing industrial base and strategic location, the Investment Zone aims to create a hub for innovative and sustainable industry. This approach aligns with broader national objectives of achieving net-zero emissions and fostering economic growth that benefits both the local community and the wider Scottish economy.

Appendix 02 - Influencing Factors - Grangemouth Future Industry Board (GFIB)

The Grangemouth Future Industry Board (GFIB) was established by the Scottish Government in September 2020 to align public sector initiatives and support Grangemouth's role as a critical hub of industrial and economic activity vital to Scotland's economy.

GFIB comprises members from various public sector bodies, including the Scottish Government, Falkirk Council, Scottish Enterprise, Transport Scotland, the Scottish Environment Protection Agency, the Scottish Futures Trust (SFT), Skills Development Scotland, and Forth Valley College. These partners collaborate to ensure that Grangemouth maintains and develops its competitiveness now and in a net-zero future.

The board's current workstreams include skills development, infrastructure enhancement, project development and strategic investment, the establishment of a Grangemouth Regulatory Hub, and ensuring a Just Transition towards net-zero emissions.

In summary, GFIB, alongside Falkirk Council, SFT, and industry partners, works collaboratively to guide Grangemouth's industrial evolution, ensuring economic growth aligns with safety regulations and the well-being of the local community.



Drop-in events

Each of events on 26th and 28th August extended from the afternoon into the evening,. They were staffed by Council officers and the masterplanning team, with a series of display boards summarising the draft documents to inform and stimulate discussion.

A total of 32 members of the public participated across the two events.

The main points raised across the sessions were as follows, in no particular order:

- Will the existing 1970s Town Centre La Porte Precinct area be retained or demolished? If it is to be retained, how will be incorporated into the new proposals?
- How will HGV traffic flow around the town be managed? (not adhered to currently)
- Grangemouth needs better public transport, with the town feeling cut off especially in the evenings. Will a new railway station happen? Mixed views on whether it is necessary.
- Will the flood defences go ahead? What is the process and where does the funding come from?
- The sea cannot currently be seen from the town; it would be good to open up access to the water.

- Need to improve connections between the Town Centre and Asda, past the disused La Scala cinema. Mixed views on whether the disused cinema should be demolished (e.g. to open up the connection), retained as a façade or retained in its entirety.
- The public realm could be included around Bo'ness Road, including enabling temporary road closures to create space for events.
- Better maintenance needed in the Town Centre litter, rubbish, footway condition etc. Bin management and cleanliness are also issues around the town as a whole.
- HMOs cause problems for other local residents; need to prevent more being created.
- · There are insufficient GP / dental surgeries in the town.
- Replacement of hedges around the town with brick walls reduces parking and aesthetic value.
- · Great plan but will it ever happen? Who will pay for it?





Community survey

85 people responded to the survey. It was promoted at the drop-in sessions and online through the Council's Participate Plus platform and social media. The survey could be completed online or in hard copy for a period of 4 weeks.

Overall, the survey responses show strong support for regeneration focused on community wellbeing, connectivity (especially public transport), skills development, sustainability, and improved public spaces—but also significant concern about basic service provision, housing types (especially HMOs), and the need for practical delivery over ambitious rhetoric. It was suggested that the final version of the documents could be made easier to navigate.

Most respondents consider the **four main objectives** for Grangemouth—quality of life, reconnecting with water, industrial transition, and balancing local/national roles—as very important for the town's future. There is especially strong support for making Grangemouth an attractive, sustainable community with a thriving Town Centre.



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Grangemouth Masterplan



The Council has prepared a draft Spatial Vision for the future of the whole of Grangemouth, and a Masterplan for the town centre.

Their aims are to:

- Agree high level priorities to guide how the town will change on the ground over the coming years.
- Trigger detailed action planning to implement those priorities, including testing different options for improving the town centre.
- Complement and support other ongoing work in Grangemouth, including the Community Action Plan and Greener Grangemouth.

It will take time to fix the big challenges that the town faces-including changing the town's

Read more ↓



Grangemouth Masterplan - Draft.pdf

(15.8 MB)

Key priorities and trends emerging from the survery responses:

1. Town Centre Regeneration and Community Facilities

There is widespread agreement on the need to revitalise the Town Centre, with calls for a vibrant, mixed-use hub including retail, housing, leisure, and culture, and prioritising pedestrianfriendly streets and green spaces [most responses].

Many want investment in community facilities and hubs, such as Bowhouse Community Centre, which is currently closed and seen as a loss to the community.

Concerns are raised about the closure or sale of public buildings and community centres, with several respondents criticising council decisions that have reduced local facilities.

2. Housing

Affordable housing is widely supported, but there is strong opposition to further development of flats and HMOs (houses in multiple occupation), which are seen as unattractive and detrimental to community cohesion.

Some express concern about housing allocation, particularly regarding perceived increases in the migrant population and access to services.

3. Active Travel and Connectivity

Improving walking, cycling, and public transport links is a high priority for many, with repeated calls for better connections—especially a direct bus link or train station to Polmont.

The idea of a "mobility hub" is generally well received but not always clearly understood; some want more detail on what this would mean in practice.

There is also a call for good cycle links to nearby towns to encourage tourism and active travel.

4. Skills, Green Economy, and Sustainability

Many respondents rate skills development and the green economy as very important.

There is broad support for blue-green infrastructure and climate resilience, though a minority are sceptical about "green" initiatives or feel they are being pushed too quickly.

Some want more focus on practical sustainability measures like tree planting and permeable surfaces rather than heavy engineering.

5. Cleanliness, Safety, and Basic Services

Several comments highlight concerns about litter, dog mess, general cleanliness, and safety in public spaces. Calls are made for more community wardens and better basic maintenance.

Frustration is expressed that volunteers are left to maintain public spaces due to perceived council neglect.

6. Activities and Leisure

There is demand for more family-friendly activities and evening leisure options such as cinemas, bowling, arcades, and classes.

The need for performance spaces for local groups is also mentioned.

7. Accessibility

While active travel is supported, some stress the need to ensure accessibility for those with limited mobility and to maintain parking in the Town Centre.

8. Divided Views

While most responses are positive about regeneration aims, a minority are sceptical or strongly opposed to aspects of the plan—especially those relating to sustainability, mixed-use development, or community-led initiatives. Some express distrust in the council's ability to deliver or prioritise basic services.

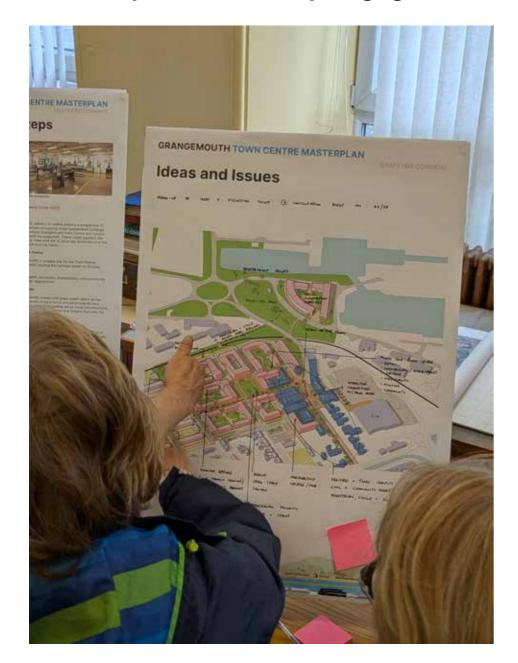
A few comments reflect anti-migrant sentiment or opposition to housing provision for immigrants.

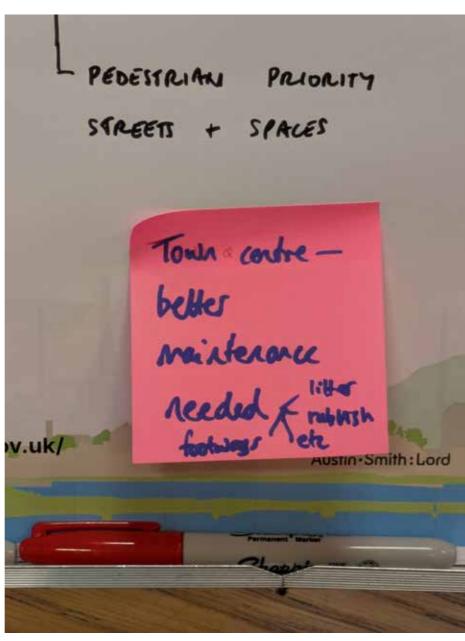
9. Other Suggestions

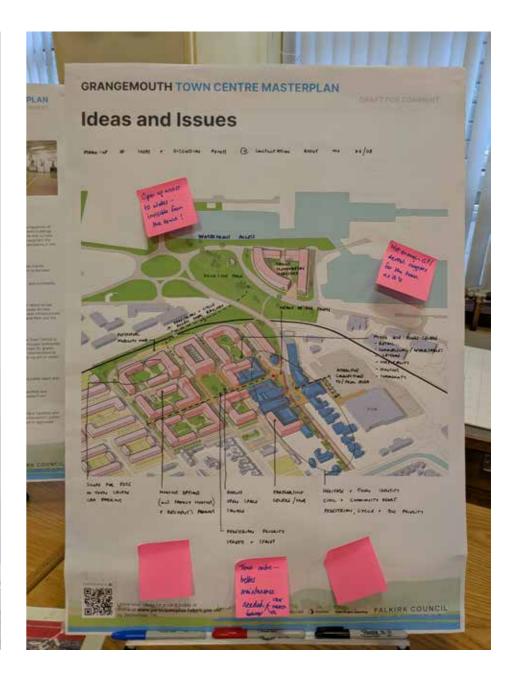
Calls for a train station are frequent; many see this as transformative for connectivity.

Some suggest focusing on fundamentals—housing quality, functional Town Centre—before investing in place identity or branding.

There are requests for more joined-up thinking between this plan and other council strategies (such as property reviews or flood defences).











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Project:	Grangemouth Spatial Vision and Town Centre Masterplan
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Prepared by:	Shannon Sweeney
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Approved by:	Ralston Mackenzie

Technical Note

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V0.1	07/03/25	Draft	SS	ER	RM
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1 Introduction

1.1 Background and Purpose

- 1.1.1 Falkirk Council has commissioned a multi-disciplinary team led by architects Austin-Smith:Lord to deliver a Spatial Vision and Town Centre Masterplan for Grangemouth. Stantec's role in this team is to lead on transport and movement considerations.
- 1.1.2 This document has been produced as a technical appendix to the Spatial Vision and Town Centre Masterplan document prepared by Austin-Smith:Lord. Its purpose is to provide further detail to transport considerations relating to **Grangemouth's Spatial Vision (Part 02 and 03)**. A separate technical appendix document has been prepared by Stantec relating to the Town Centre Masterplan (Part 04).
- 1.1.3 This document initially summarises transport conditions within Grangemouth which informs the identification of key transport-related strengths, weaknesses, opportunities, and threats. The document subsequently provides further detail relating to transport and movement elements of the Spatial Vision outlined in the main document alongside recommended short-term priority interventions.
- 1.1.4 It should be noted that the existing transport conditions review (Sections 2 4) largely replicates key information contained within a more comprehensive **Grangemouth Transport Study** which was prepared separately by Stantec in July 2024. This study is an **Initial Appraisal 'Case for Change'**, delivered in accordance with Scottish Transport Appraisal Guidance (STAG). This separate document can be read for further detail if required.

2 Existing Transport Network

2.1 Introduction

2.1.1 This section summarises the existing transport network in and around Grangemouth. The analysis considers active travel, public transport and road-based transport in priority order in line with the National Transport Strategy 2 Sustainable Travel Hierarchy.

2.2 Active Travel

2.2.1 Figure 2-1 illustrates the location of key facilities located within the town and a 30-minute walking and wheeling catchment map from the town centre.

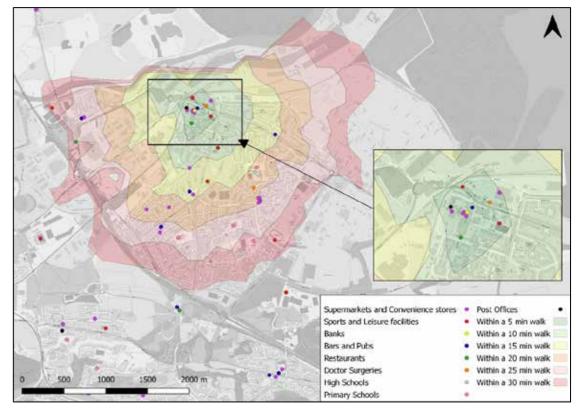


Figure 2-1: Walking catchment map

- 2.2.2 Figure 2-1 demonstrates that there are amenities, such as schools and shops, spread across the town, including within Bowhouse and Kersiebank, albeit most amenities are located in the town centre. This underlines the potential that strengthened walking and wheeling links to these destinations could have on encouraging more active travel journeys, particularly for everyday journeys.
- 2.2.3 Several on-site inspections of walking and wheeling infrastructure were undertaken by Stantec during 2024 has highlighted that the existing infrastructure is constrained, especially for those with mobility impairments. Key issues include:
 - Difficulty crossing key roads: Crossing key / strategic roads such as Inchyra Road, Newlands Road and Earl's Gate Roundabout can be challenging due to indirect routeing to access crossing points alongside feeling unsafe due to high traffic flows, including a high percentage of HGVs, and a lack of controlled crossing facilities.
 - Poor quality footways: Some footways, such as on Inchyra Road (see Figure 2-3) are in a poor condition and do not provide a level surface.
 - Lack of dropped kerbs: which is problematic for those with mobility impairments, such as the Dundas Street / Wallace Street junction (Figure 2-4).
 - Wide junctions: Several junctions have generous geometry that was designed to
 accommodate HGVs which can result in lengthy crossing distances across the mouth of
 junctions and high vehicle approach speeds, causing problems for people with mobility
 impairments, such as the junction between Bo'ness Road and Union Road.
 - **Sense of personal security:** Some walking routes (e.g., Primrose Avenue underpass Figure 2-5) may feel unsafe for some people at night due to a lack of building frontage and general activity.



Figure 2-2: Example of lack of dropped kerbs



Figure 2-3: Poor quality footways example



Figure 2-4: Example of lack of dropped kerbs



Figure 2-5: Primrose Avenue underpass

2.2.4 Figure 2-6 and Figure 2-7 show existing core paths¹ and the cycling network.



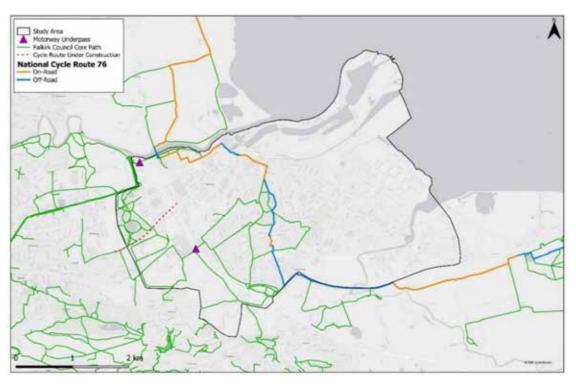


Figure 2-6: Existing cycle routes and core paths



Figure 2-7: Map of existing cycle infrastructure²

2.2.5 As can be seen from Figure 2-6 and Figure 2-7, the only designated cycle route serving Grangemouth is National Cycle Network (NCN) Route 76 connecting the town to Stirling and Bo'ness. There are **no specifically designated cycle routes connecting Grangemouth to Falkirk, or Polmont**, despite data suggesting these movements represent the main desire lines.

- 2.2.6 The Forth and Clyde Canal Extension towpath to the west of Grangemouth is accessible via the Charlotte Dundas Heritage Trail. There is a consensus among key stakeholders, such as Scottish Canals and Sustrans, that active travel connections from the Charlotte Dundas Heritage Trail and Glensburgh towards Grangemouth could be enhanced to benefit residents and visitors; particularly those from the Helix Park.
- 2.2.7 Zetland Park is a key focal point for active travel routes within the town, with several routes converging at this location. Zetland Park is also home to a recently upgraded BMX Pump Track, which is a key community focal point for leisure cycling and other wheeled activities.
- 2.2.8 The existing cycle infrastructure within the town consists of a mixture of shared use paths (e.g., Inchyra Road) and on-road cycle lanes (e.g., Bo'ness Road). This existing cycling infrastructure generally has a **low level of service according to the core principles set out in Cycling by Design guidance**. Key issues include:
 - Mixing with higher traffic volumes: There is an absence of physical cycling infrastructure on key roads to separate people cycling from higher traffic flows, including HGVs. One such example is Bo'ness Road through the town centre.
 - Lack of controlled crossings: There is a lack of controlled crossings to connect cycle
 routes at key locations with higher traffic flows, such as on Inchyra Road and on Bo'ness
 Road.
 - **Incoherent network:** The inconsistency of cycling infrastructure provision (e.g., on road and shared use paths) within the town combined with limited wayfinding signage means the current cycling network within the town is challenging to navigate.
 - Narrow shared use paths: There are extensive examples of shared use paths within
 Grangemouth which are well below the minimum width standards required, such as within
 Zetland Park. This can result in conflicts arising with people walking and wheeling.

2.3 Public Transport

- 2.3.1 The bus is the primary mode of public transport in Grangemouth, which plays a prominent role due to the towns' lower than average car ownership rates and significant outward and inward commuting flows.
- 2.3.2 Grangemouth's bus network combines local services operated by Midland Bluebird (McGills) and longer distance coach connections operated by Stagecoach and Scottish CityLink. The existing services operating in the town are shown in Figure 2-8.

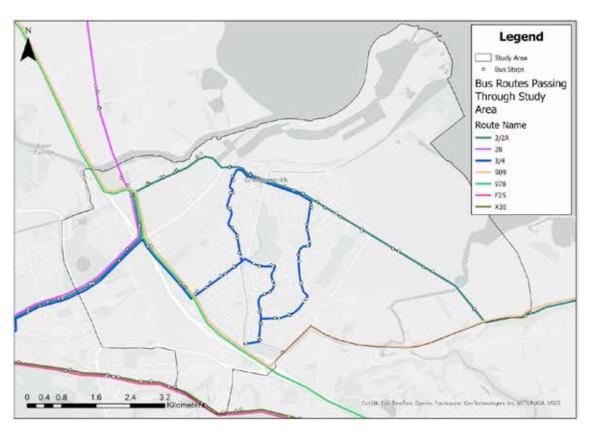


Figure 2-8: Map of existing bus network

- 2.3.3 The main points of note from Figure 2-8 are:
 - The core Grangemouth bus network is formed by the Midland Bluebird services **2**, **2A**, **3** and **4**, which serve the main residential areas. These services operate on a half-hourly basis and provide a good service frequency between Grangemouth and Falkirk.
 - Service 2/2A extends to Forth Valley Royal Hospital, improving connectivity to this
 important destination and operates half-hourly. However, this service is only easily
 accessible for residents living in the north of the town and journey times are long
 compared to travelling by car.
 - Inter-urban coach services operated by Stagecoach and Scottish CityLink provide longerdistance connectivity to Edinburgh, Stirling and Dunfermline Queen Margaret Hospital. However, as can be seen from Figure 2-8, these buses only serve the edge of the town and are thus inconvenient for most residents and commuters.
- 2.3.4 To put the above into context, Figure 2-9 shows the frequency of bus services at each individual bus stop within Grangemouth. This demonstrates that the residential core of Grangemouth generally benefits from a half-hourly service across the day, with more frequent services of between two and four services per hour available on Bo'ness Road and Newlands Roads. Areas to the northwest, particularly Skinflats, have a very low service frequency.

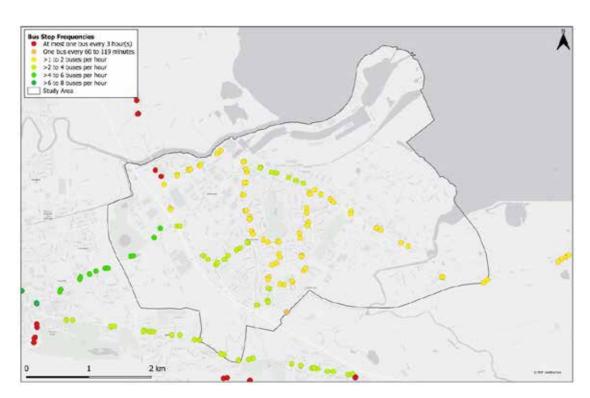


Figure 2-9: Map of bus frequencies by stop

- 2.3.5 Grangemouth is served by a west-facing railway branch line. Rail freight flows consist of petroleum products from Grangemouth Refinery (relating to aviation spirit and heavier oils) and inter-modal freight flows from both the Grangemouth Logistics Centre and the Grangemouth Docks Inter-modal Terminal.
- 2.3.6 Grangemouth lost its only passenger railway station (positioned near the town centre) in 1968. This means that access to the railway network for Grangemouth residents is via Falkirk Grahamston, or Polmont stations. The latter offers higher frequency services to Glasgow and Edinburgh, meaning it is the key station from a Grangemouth perspective.
- 2.3.7 Whilst both stations offer high quality and frequent train services, connectivity to both stations using active modes or by bus is sub-optimal. In many instances, the time, cost and effort of travelling to the railway station makes the car a more attractive option for undertaking the totality of the journey.
- 2.3.8 Taking the above situation into account, Figure 2-10 and Figure 2-11 illustrates public transport journey time catchment maps for Grangemouth.

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2.3.9 The two figures demonstrate that public transport journey times for residents are long and generally uncompetitive with the car, with the key issue being the requirement for an interchange. Indeed, there is evidence to suggest that this directly results in a poor level of connectivity to employment for Grangemouth residents; suggesting that this may be contributing to levels of deprivation in the town.

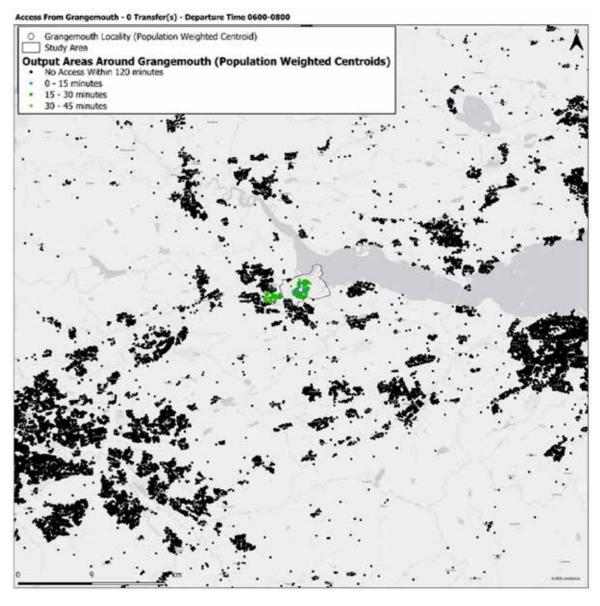


Figure 2-10: Journey time catchment map showing area that can be accessed by public transport for journeys departing between 06:00 and 08:00 on a weekday with <u>no transfers</u>

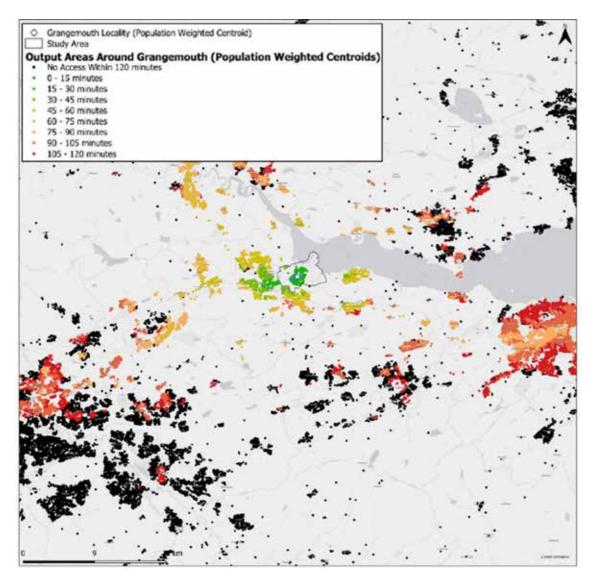


Figure 2-11: Journey time catchment map showing area that can be accessed by public transport for journeys departing between 06:00 and 08:00 on a weekday with 2 transfers

2.4 Traffic and HGVs

2.4.1 The road network and existing weight restrictions that impact HGVs on the local road network in Grangemouth is shown in Figure 2-12.

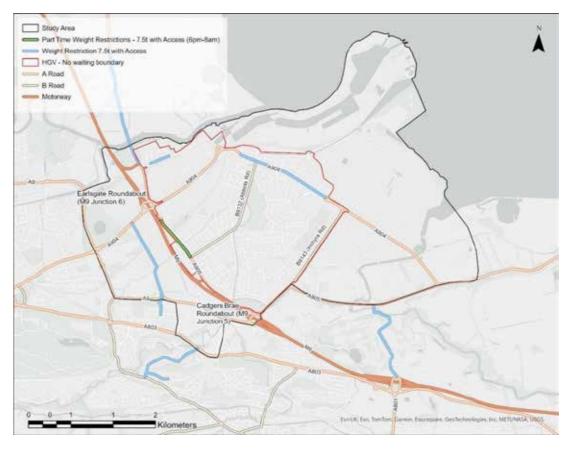


Figure 2-12: Road network and weight restrictions in Grangemouth³

- 2.4.2 Figure 2-12 demonstrates that the main strategic routes in the study area are as follows:
 - The M9 provides east-west / north connectivity to Edinburgh, Glasgow, Stirling and beyond via the Earl's Gate Roundabout (Junction 6) and Cadgers Brae Roundabout (Junction 5)
 - The **A904** connects the town to Falkirk via Earl's Gate Roundabout. The section between Westfield Roundabout and Earl's Gate Roundabout is currently being upgraded to a dual carriageway and a shared use path, which is due to open in 2026.
 - The **A801** is the primary route connecting Grangemouth with West Lothian and the distribution centres located adjacent to the M8 motorway.
- 2.4.3 There is no eastbound on-slip or westbound off-slip at M9 Junction 6. This means traffic routing to and from the east must use M9 Junction 5 to access the town. This results in more traffic using the local road network via either Beancross Road, Laurieston Road or the A9 (depending on vehicle type and time of day) to travel to and from Cadgers Brae Roundabout.

HGVs

- 2.4.4 Accounting for the surrounding land uses, is it estimated that there are between 3,820 and 4,300 daily HGV movements per day in the town at present. The key sources of HGV movements are from Forth Ports Grangemouth, businesses located on Laurieston Road, the Petroineos Tanker Terminal and Asda's Ambient Distribution Centre.
- 2.4.5 As shown in Figure 2-12, there are numerous environmental related 7.5t weight limits in place in Grangemouth, which restricts HGV routing (except for access). All these restrictions are in place for 24-hours a day except for Beancross Road, where only a timed restriction is in place overnight between 18:00 and 08:00hrs.

9

³ Weight restriction boundaries have been prepared based on TRO information supplied by Falkirk Council. Signage in place on Laurieston Road does not align with TRO presented in the map.

Grangemouth Spatial Vision – Transport and Movement Summary Technical Note 06 March 2025

- 2.4.6 Based on a review of evidence and through anecdotal feedback, HGVs regularly use roads in Grangemouth where weight restrictions are present which can detrimentally impact resident amenity in the town.
- 2.4.7 Despite the prominence of HGVs in the town, there is no dedicated HGV parking with welfare facilities available within or near the town. In addition, most of Grangemouth is additionally covered by a Controlled Parking Zone (CPZ) which was introduced in 2021 and prohibits HGVs from parking at any time within the public road extents (shown in red in Figure 2-12).
- 2.4.8 Anecdotally, it is understood through numerous discussions held with key stakeholders, including Grangemouth Community Council, that HGVs regularly park overnight in contravention of this CPZ. Not only is this problematic for drivers' health, safety and wellbeing, it results in negative amenity for Grangemouth's residents.

3 Existing Residents' Travel Behaviour

- 3.1.1 An online public travel behaviour survey was recently conducted by Stantec as part of the separate Grangemouth Transport Study. The survey was available to complete online for a three-week period between 18th March and 7th April 2024, receiving a total of 252 responses, 70% of which were Grangemouth residents.
- 3.1.2 Figure 3-1 summarises the method of travel choice used most frequently by residents of Grangemouth for journeys within the town and for journeys to and from Falkirk.

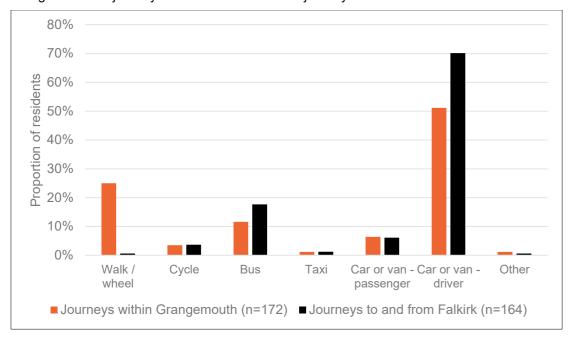


Figure 3-1: Main mode of travel comparison from 2024 online survey

- 3.1.3 Figure 3-1 demonstrates several key findings:
 - Only a quarter of residents (n=43) regularly walk or wheel for local journeys in Grangemouth, despite Grangemouth being relatively compact and most households being located within a reasonable walking or wheeling distance of shops and local services.
 - Only around 3% of journeys (n=5) made by residents in Grangemouth are undertaken by bike.
 - There is only **limited use of the bus for local journeys in Grangemouth**, representing around 12% (n=20) of journeys.
 - Car is by far the most popular method of travel for journeys in Grangemouth, representing 58% of journeys (n=100).

3.1.4 2011 Census⁴ travel-to-work data has been additionally analysed to establish commuting behaviour of Grangemouth residents, albeit it should be noted that this dataset is now very old. Figure 3-2 illustrates travel-to-work mode split data covering the Grangemouth locality alongside equivalent data for Falkirk Council and Scotland whilst Figure 3-3 identifies the reported distance travelled to work.

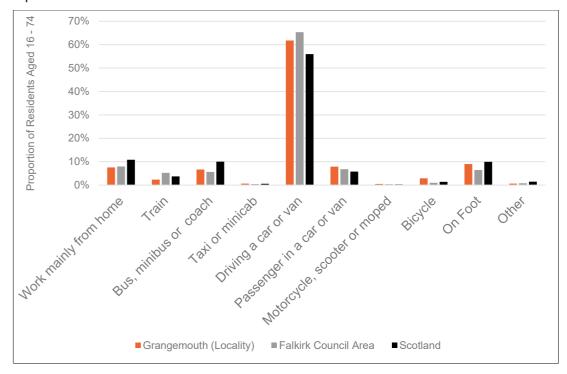


Figure 3-2: Method of travel to work aged 16-74 excluding full time students (2011 Census)

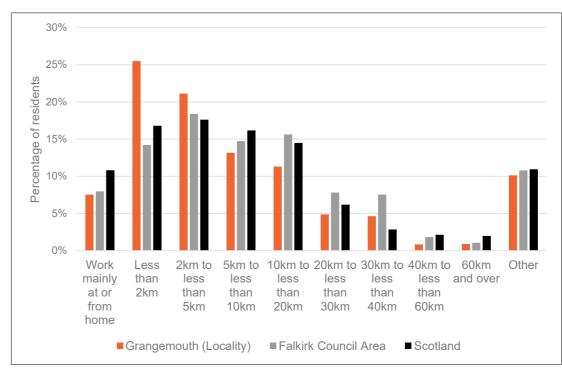


Figure 3-3: Distance travelled to place of work (2011 Census)

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- 3.1.5 Figure 3-2 demonstrates that there is a high level of car use amongst Grangemouth residents for commuting (62%) which is higher than the national average (56%) but marginally lower than the Falkirk Council area average (65%).
- 3.1.6 Figure 3-3 shows that a high proportion of Grangemouth residents (25%) travelled less than 2km to work in 2011, suggesting that they worked somewhere in the town. By contrast Grangemouth residents made far fewer travel-to-work trips over 5km relative to the Falkirk and Scotland averages, which may be explained by limited longer distance public transport connections from the town.

Grangemouth Spatial Vision – Transport and Movement Summary Technical Note 06 March 2025

4 Key Strengths, Weaknesses, Opportunities and Threats

- 4.1.1 The following section provides a summary of Grangemouth's strengths, weaknesses, opportunities, and threats, relating to transport. This builds upon the key findings presented in sections 2 and 3 and the SWOT analysis presented in the main Spatial Vision and Town Centre Masterplan document.
- 4.1.2 It should be noted that the SWOT identified are not exhaustive and have been tailored to the context of this study. A full list of structured transport problems can be found in the **Grangemouth Transport Study** highlighted above.

Table 1: Transport-Related Strengths, Weaknesses, Opportunities, Threats Analysis

Strengths

Natural and Green Spaces: Grangemouth has an abundance of green spaces such as Zetland Park which are pleasant environments that complement active travel.

- Zetland Park BMX Pump Track: This is a key community facility for leisure cycling and other wheeled activities.
- Helix Park: Grangemouth is adjacent to Helix Park which already attracts a significant number of visitors to the area.
- Flat topography: Grangemouth is flat which naturally lends itself well to active travel.
- Proximity to motorway network: Grangemouth benefits from good connectivity to the broader road network through access to the M9 motorway.

Weaknesses

- Poor public transport connectivity: the key problem facing Grangemouth. This encourages car use and limits access to employment, services and leisure for residents unable to drive or without access to a car.
- Limited active travel connections: There are no specifically designated cycle routes connecting Grangemouth to Falkirk or Polmont. There are also concerns over existing facilities which provide safety concerns due to poor provision, or type of provision such as underpasses.
- Sub-standard walking and wheeling infrastructure:
 Existing infrastructure in the town is constrained, especially for those with mobility impairments.
- Poor cycling infrastructure: Existing cycling infrastructure in the town generally has a low level of service according to Cycling by Design guidance.
- Impacts of HGVs on residents' amenity: HGVs regularly
 use roads in Grangemouth with weight restrictions present
 which can detrimentally impact resident amenity in the town.
 In addition, HGVs regularly park overnight within the town
 which is in contravention of the CPZ in place.

Opportunities

New active travel connections: such as improved connections within the town and to / from Falkirk, Polmont and Bo'ness.

- Enhanced active travel infrastructure: principally to improve safety, coherence, inclusivity and reduce conflict for people walking, wheeling and cycling, such as through widened shared use paths and segregated cycleways.
- HGV welfare facilities: this would support businesses and haulier operating in the town whilst also reducing the impacts of overnight HGV parking on residents' amenity. There may also be opportunity to incorporate Electic Vehicle Charging facilities.
- Public transport improvements: There is a strategic opportunity to improve public transport to broaden the number of destinations that can be accessed directly.
- HGV management: Such as through greater enforcement of existing HGV weight restrictions, or the provision of new or amended restrictions.

Threats

- HGV traffic and industry impact: Industrial activity could continue to create safety and environmental concerns relating to the impact of HGVs on residents' amenity.
- Loss of key amenities: the community could lose valuable local facilities, which in turn may reduce the potential of encouraging active travel for local journeys.
- Flood risk: The impacts of climate change may increase the risk of key transport infrastructure being flooded in future given Grangemouth is already in a high-risk flood area.
- On-street parking reliance: Most households in Grangemouth are either flats or terraced housing which results in an increased dependency upon residential onstreet parking in the town, thus limiting the potential for road space-reallocation projects
- Bus network commercial viability: All local bus services are operated on an entirely commercial basis which constrains the ability of the Council to upgrade the network. Any continuation in population decline in the town may threaten the future networks' commercial viability.

5 Spatial Vision – Movement

- 5.1.1 As set out in the main document, the Vision for Grangemouth is to create a resilient, sustainable, and vibrant town that embraces its rich industrial heritage while offering a high quality of life for its residents. The four objectives cover:
 - A sustainable community with a better quality of life
 - A town maximising the benefits of industrial transition
 - Restoring Grangemouth's relationship to the waterfront / shore
 - A local place with a regional / national role
- 5.1.2 A core cross-theme element of the Vision is **upgraded transport infrastructure**, **particularly for sustainable modes**, to reduce the dominance of traffic in the town and residents' reliance on cars for everyday 'local' journeys. This, in turn, aims to encourage healthier lifestyles, strengthen community cohesion, and create a more welcoming environment for residents and visitors alike.
- 5.1.3 The following sections summarise the key aspects of the spatial vision relating to transport and movement. The analysis considers active travel, bus, rail and road-based transport in priority order in line with the National Transport Strategy 2 Sustainable Travel Hierarchy.

Future Active Travel Vision

- 5.1.4 As highlighted within the Spatial Vision document, one of the overarching key moves is **to improve active travel connections** throughout Grangemouth, and with neighbouring towns, including Falkirk, Glensburgh and Polmont.
- 5.1.5 The vision is that any upgraded or new active travel connections would be **easy-to-use**, **continuous**, **coherent**, **feel safe** and **inclusive to all users**. Cycle routes would have a high level of service according to Cycling by Design guidance principles.
- 5.1.6 Figure 5-1 replicates the proposal for upgraded active travel connections already contained within the main Spatial Vision Document.



Figure 5-1: Potential future active travel connections

- 5.1.7 **Zetland Park presents a key opportunity to become a focal point of Grangemouth's future active travel network** given its standing at the heart of Grangemouth, serving as a central hub for community life, social gatherings and leisure activities. This would complement and enhance the potential of surrounding recreational activities, most notably Grangemouth's Pump Track, which is already used regularly by children, youth clubs and young adults for wheel sports.
- 5.1.8 There is potential for active travel connections to link into Zetland Park, so the town centre and the surrounding neighbourhood centres of Bowhouse, Beancross and Carrongrange are integrated into the network. This would mean residents have easy access to essential services such as schools, shops and health centres without relying on a car.
- 5.1.9 A key priority for any upgrades to the cycle network is that it should **feel safe to use for all**. This means that **interaction with higher traffic volumes**, **including HGVs should be avoided**, such as through installation of controlled crossings and segregated cycleways, space allowing. It will also be important to **limit any conflict between people cycling and people walking or wheeling** such as through delivering widened shared use paths that meet modern standards.
- 5.1.10 There is significant potential to strengthen Grangemouth's external active travel connections to the wider network to improve connectivity with surrounding towns and villages, such as Falkirk, Polmont, and Bo'ness for residents and visitors alike.

Future Public Transport Vision

- 5.1.11 The future vision is that Grangemouth's public transport will be seamlessly integrated with the surrounding transport network and will be easy and convenient to use for everyday journeys, including within the town, for journeys to surrounding towns like Falkirk, and further afield
- 5.1.12 There is an opportunity to modernise bus infrastructure, such as through upgrading waiting facilities, bus shelters and providing real-time passenger information systems at stops. This will provide a more **pleasant experience** for people using the bus.
- 5.1.13 Another key opportunity is to improve the connectivity of Grangemouth's bus network with the surrounding walking and wheeling network, such as through delivering new crossing facilities and widened footways to allow people to get to and from bus stops more easily.
- There is also potential to consider a new mobility hub / local transport interchanges within Grangemouth to allow people to have a **seamless transition between the bus and different transport modes**, such as bikes or electric vehicles. Such facilities would provider wider benefits to the Grangemouth community through provision of complementary amenities such as charging stations and smart lockers.
- 5.1.15 The Grangemouth Transport Study Initial Appraisal Case for Change (2024) study has explored more strategic opportunities related to major upgrades to public transport, which are included as part of the long list of options. Should the Grangemouth Study progress in future, these options will be explored further as part of a preliminary and detailed appraisal process in partnership with wider stakeholders such as Transport Scotland, Scotrail, Network Rail and McGill's.

Future Vision for Traffic and HGVs

- 5.1.16 As highlighted within the Spatial Vision document, one of the overarching key moves is **to** reduce the adverse impact of industry on town life through fostering a more harmonious coexistence between industrial and residential areas.
- 5.1.17 At the core of is the potential for greater enforcement of existing HGV weight restrictions in the town and considering further restrictions to **minimise disruption**, **noise**, **and pollution for residents in the town**. This would also support **enhanced community safety for people walking**, wheeling or cycling, including among children travelling to and from school.

5.1.18 Figure 5-2 replicates the vision for HGVs already contained within the main Spatial Vision



Figure 5-2: Potential HGV routing and management

- 5.1.19 Providing dedicated HGV parking and welfare facilities for hauliers is another key opportunity that could be considered in partnership with key stakeholders, including businesses within the town. Offering suitable and well-equipped rest areas for drivers would help to discourage the use of informal or unsuitable locations, thereby **improving the town's environment and reducing the burden on residential areas**.
- 5.1.20 More broadly, it will be important for residents to have access to enhanced electric vehicle charging facilities so that Grangemouth residents living in flats or terraced housing, including those without driveways, can make the **switch to meet net zero targets**.

6 Recommended Next Steps

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- As a short-term priority, it is recommended that Falkirk Council advance the **Grangemouth**Transport Study Initial Appraisal Case for Change (2024) to the preliminary and detailed appraisal stages. In collaboration with key stakeholders, such as Transport Scotland and local business groups, this next phase would involve appraising the merits of a long list of potential local and strategic transport option interventions within and around Grangemouth.
- 6.1.2 Key <u>potential options</u> relevant which are all required to be **subject to further preliminary** and detailed appraisal include:
 - Enhance the inclusivity of walking and wheeling infrastructure in Grangemouth, such as through new dropped kerbs, tactile paving, and refuge islands
 - New cycle route(s) to connect Grangemouth with surrounding towns such as Falkirk, Bo'ness, Polmont and Stenhousemuir
 - Upgrade and modernise bus stop infrastructure across Grangemouth
 - Review the wider Falkirk bus network to understand any opportunities / changes that can be made to improve the service locally
 - Improve compliance of HGV weight restrictions in the town such as through enhanced signage or improved information provision
 - **Develop an HGV Traffic Management Plan** to examine the suitable of current environmental weight restrictions and the potential for further restrictions

- Work with local bus operators to deliver new or upgraded bus services which makes Grangemouth more accessible from a broader range of destinations
- Work with partners, including Transport Scotland and Scotrail, to explore potential of a passenger rail station and rail service in Grangemouth
- New easterly on and off slip at the M9 Junction 6 (Earl's Gate Roundabout)
- Work with key stakeholders and industry bodies explore the potential for formal HGV parking and associated welfare facilities in, or near Grangemouth.



Technical Note

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Project:	Grangemouth Spatial Vision and Town Centre Masterplan					
Project code:	332611819					
Date:	21/03/25					
Prepared by:	Shannon Sweeney					
Checked by:	Elliot Reid					
Approved by:	Ralston Mackenzie					

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V0.1	21/03/25	Draft	SS	ER	RM
V1.0	23/05/25	Final	SS	ER	RM

DOCUMENT ISSUE RECORD

This report has been prepared by Stantec UK Limited ('Stantec') on behalf of its client to whom this report is addressed ('Client') in connection with the project described in this report and takes into account the Client's particular instructions and requirements. This report was prepared in accordance with the professional services appointment under which Stantec was appointed by its Client. This report is not intended for and should not be relied on by any third party (i.e. parties other than the Client). Stantec accepts no duty or responsibility (including in negligence) to any party other than the Client and disclaims all liability of any nature whatsoever to any such party in respect of this report.

1 Introduction

1.1 Background and Purpose

- 1.1.1 Falkirk Council has commissioned a multi-disciplinary team led by architects Austin-Smith:Lord to deliver a Spatial Vision and Town Centre Masterplan for Grangemouth. Stantec's role in this team is to lead on transport and movement considerations.
- 1.1.2 This document has been produced as a technical appendix to the Spatial Vision and Town Centre Masterplan document prepared by Austin-Smith:Lord. Its purpose is to provide further detail to transport considerations relating to the <u>Town Centre Masterplan (Part 04)</u>. A separate technical appendix document has been prepared by Stantec relating to the Spatial Vision (Parts 02 and 03).
- 1.1.3 This document initially summarises existing transport conditions within Grangemouth town centre, including analysis of parking and traffic survey data collected. This informs the identification of key transport and movement related strengths, weaknesses, opportunities, and threats. The document subsequently sets outs an outline vision for transport and movement elements of the Masterplan outlined in the main document.
- 1.1.4 It should be noted that this document builds on a previous Grangemouth Transport Study Initial Appraisal and Case for Change, prepared by Stantec in 2024. This separate study incorporates a comprehensive multi-modal review of the existing transport network in and around Grangemouth and should be referred to for further details, where relevant.

2 Existing Conditions

2.1.1 This section summarises the existing transport network in and around Grangemouth town centre. The analysis considers active travel, public transport, and road-based transport in priority order in line with the National Transport Strategy 2 Sustainable Travel Hierarchy.

2.2 Town Centre Context

2.2.1 An onsite inspection of Grangemouth town centre was undertaken by Stantec in November 2024. **Figure 2-1** shows the key locations visited that are referred to within this section.



Figure 2-1: Grangemouth town centre key context

- 2.2.2 As demonstrated in **Figure 2-1**, Grangemouth town centre serves as an important retail and civic hub. There are several key civic buildings in the town centre located on Bo'ness Road (A904), including Grangemouth Town Hall.
- 2.2.3 At the heart of the town centre is La Porte Precinct which consists of glass covered arcade flanked by retail units and civic space constructed in the 1970s. La Porte Precinct is bound by Bo'ness Road (A904) to the north, Union Road to the west and Kerse Road to the south. The town centre is also home to a large ASDA Superstore on Dock Road.
- 2.2.4 One of Grangemouth's key attractions, Zetland Park, is located to the south-east of the town centre area, and less than 10 minutes-walk to La Porte Precinct.

2.3 Walking and Wheeling

- 2.3.1 La Porte Precinct, which is a key focal point for pedestrian activity in the town centre, features a network of partially covered traffic free paths lined with retail frontages (see Figure 2-2). There is an abundance of street furniture, including benches, planters and trees (see Figure 2-3).
- 2.3.2 The key access points to La Porte Precinct for people walking and wheeling are to the north via Bo'ness Road (A904) and to the south via Kerse Road. As of November 2024, the southern access point is closed due to demolition works which means pedestrians must divert via the Union Road Car Park.

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Austin - Smith : Lord





Figure 2-2: Covered walkways in La Porte Figure 2-3: La Porte Precinct street furniture **Precinct**

- 2.3.3 The railway line disrupts connectivity for pedestrians approaching the town centre from the west. This means that people walking or wheeling from this direction must traverse the Station Road (A904) railway overbridge.
- Access to and from the Station Road (A904) overbridge is constrained by the junction between Kerse Road which is wide due to the need to accommodate HGVs and has no formal crossing provision. This means pedestrians must divert via the staggered zebra crossing facility on Bo'ness Road (A904) to access the overbridge.
- 2.3.5 The overbridge itself has high traffic volumes, including HGVs, which makes it an unpleasant environment for people walking and wheeling. In addition, there are occasional pinch points which may lead to difficulties for people in wheelchairs, mobility or visually impaired or pushing prams (see Figure 2-4).
- 2.3.6 The heavily trafficked Timber Basin Roundabout provides a further key barrier for people walking and wheeling from the west given the absence of formal crossing provision. As shown in Figure 2-5, North Shore Road is particularly challenging to cross given the volumes of HGVs present, the width of the road and the lack of pedestrian refuge islands.





Figure 2-4: Pinch point on Station Road (A904)

Figure 2-5: North Shore Road

- 2.3.7 Bo'ness Road (A904) is a key walking route for people accessing the town centre from the east. Figure 2-7 shows the footways along Bo'ness Road can be cluttered with street furniture, such as bus stops and planters, which can make it difficult to navigate.
- Additionally, the absence of dropped kerbs and tactile paving across some access points, particularly those with a poor carriageway surface condition, may pose significant challenges for individuals with mobility needs and visual impairments.





Figure 2-6: Example of street furniture clutter on Bo'ness Road (A904)

Figure 2-7: Example of dropped kerb access points in poor state of repair

- 2.3.9 Zetland Park is a key destination in Grangemouth offering a wide range of leisure activities for residents and visitors alike. It also serves as the main walking route for pedestrians accessing the town centre from the residential areas of Kersiebank and Bowhouse.
- 2.3.10 Despite this, connectivity for pedestrians between the town centre and Zetland Park is poor. There is no clear, legible walking route or wayfinding towards the town centre (see Figure 2-8) whilst footways are very narrow, particularly crossing the Grange Burn and Abbots Road (B9132) (see Figure 2-9).





Figure 2-8 Dalratho Road / Kerse Road / Abbots Road junction outside Zetland Park

Figure 2-9: Narrow footway on approach to Abbots Road crossing

2.3.11 Figure 2-10 summarises the key problems with walking and wheeling in and around the town centre.

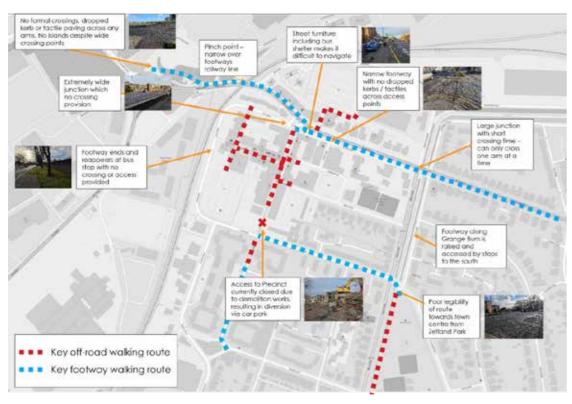


Figure 2-10: Key walking and wheeling related problems around the town centre

2.4 Cycling

Cycling is currently prohibited in La Porte Precinct. As exemplified in Figure 2-11, there are numerous signs located at key access points indicating cycling is prohibited and cyclists must dismount or risk a £20 fine. People cycling are instead encouraged to park their bike on the outskirts of the centre, or dismount and walk with their bike into the centre to access parking within the shopping area (Figure 2-12).







Figure 2-12: Cycle parking located in La **Porte Precinct**

- 2.4.2 Connectivity to Grangemouth town centre for cyclists is via National Cycle Network Route 76 (NCN76), which stretches from Berwick-upon-Tweed to Kirkcaldy, covering approximately 270 kilometres (168 miles). Locally, NCN76 connects the town centre to the residential areas of Bowhouse, Beancross, and Kersiebank as well as to Stirling and Bo'ness.
- To the west of the town centre, NCN76 consists of shared use paths which connect to a dropped kerb crossing facility on Dock Road. Due to width constraints present on Station Road

- (A904) the shared use path terminates abruptly, requiring cyclists to rejoin the carriageway. This presents two key safety issues. Firstly, Station Road (A904) is busy with traffic, including HGVs, which creates an intimidating environment for cycling. Secondly, cyclists travelling in a westbound direction from the town centre have no safe means to access the shared use path located on the opposite side of the carriageway.
- 2.4.4 As shown in **Error! Reference source not found.**, there are advisory cycle lanes present on Bo'ness Road (A904). Application of Cycling by Design guidance indicates that this cycle lane offers a very low level of service due to it being a 30mph speed limit and with over 400 vehicles in the peak hours. Evidence from the traffic surveys (see section 2.6) indicates that HGVs also use this section of Bo'ness Road despite there being an environmental weight limit in place (7.5t limit).



Figure 2-13: Advisory cycle lanes on Bo'ness Road

- 2.4.5 NCN76 provides onward connectivity towards Zetland Park via Park Road. Cyclists heading in an eastbound direction away from the town centre, are required to turn right onto Park Road across traffic, which presents safety risks given the lack of crossing facilities, particularly among less confident cyclists.
- 2.4.6 Zetland Park itself is equipped with shared use paths which offer connectivity to a Pump Track (a purpose-built track for cycling, containing turns and a circuit of rollers) which is used by the Falkirk Junior Bike Club, residents, and visitors. The park also has a cycle training facility, providing a safe space for practicing stop lines, roundabouts, and other challenging movements, especially for children.
- 2.4.7 Despite it being the most direct route connecting Zetland Park to the town centre, no cycle infrastructure or wayfinding for cyclists is provided on Dalratho Road or Kerse Road. Instead, people cycling are required to share the carriageway with traffic and navigate past parked cars.
- 2.4.8 Figure 2-14 summarises the key cycling-related problems faced in and around Grangemouth Town Centre.

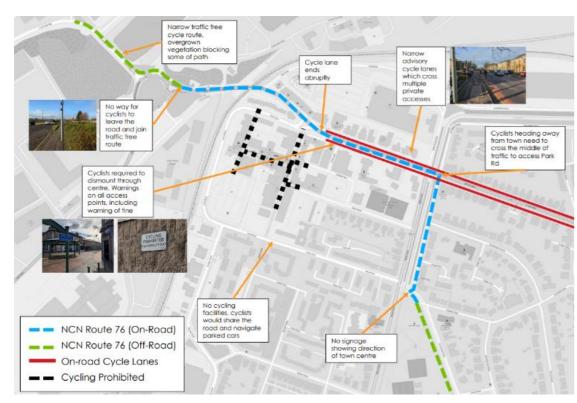


Figure 2-14: Key cycling related problems impacting Grangemouth town centre

2.5 Public Transport

- 2.5.1 Grangemouth town centre is served by four bus services, all operated by Midland Bluebird (McGills), including the Services 2, 2A, 3 and 4. The Service 3 and 4 operate on a half-hourly basis and provide a reasonable level of service frequency between Grangemouth and Falkirk. The Service 2/2A also operates every 30 minutes; providing connectivity to Forth Valley Hospital and Bo'ness.
- 2.5.2 Public transport accessibility from locations outside of Grangemouth, Falkirk and Bo'ness is very limited, particularly given all inter-city bus services only call at bus stops at the edge of the town.
- 2.5.3 A map of the nearest bus stops and services is shown in **Figure 2-15**.

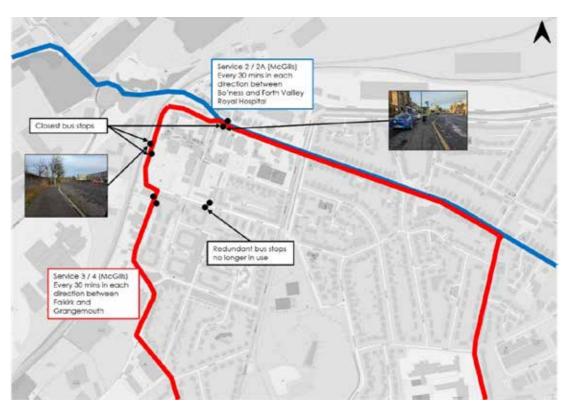


Figure 2-15: Existing bus stops and services in Grangemouth town centre

- 2.5.4 As demonstrated in **Figure 2-15**, the key bus stops serving the town centre are located on Bo'ness Road (A904) and on Union Road.
- 2.5.5 The bus stops on Bo'ness Road are equipped with bus shelters, however, as shown in **Figure 2-16**, walking routes to the stops are constrained due to limited footway widths and street furniture, which may make them difficult to access for people with mobility impairments. Additionally, no real time passenger information is provided at the stops.
- 2.5.6 Similarly, the bus stops on Union Road have shelters (see **Figure 2-17**), yet as shown in **Figure 2-18**, bus passengers are required to cross Union Road to access the northbound stop given there are no connecting footways present. There is no dropped kerb crossing facility to enable this crossing which means those in wheelchairs are unable to access this stop.
- 2.5.7 As shown in Figure 2-19, there are redundant bus stops on Kerse Road which are no longer served by a bus route. It is understood that these stops were formally served by bus routes, however, these were withdrawn several years ago by the previous bus operator (First Bus) due to commercial viability constraints and challenges associated with buses passing parked cars.



Figure 2-16: Bus stop / shelter on Bo'ness Road (A904) – westbound



Figure 2-17: Bus stop / shelter on Union Road – southbound



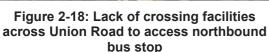




Figure 2-19: Redundant bus stop on Kerse Road

2.6 Parking

Existing Provision and Capacities

Table 2-1 summarises the existing car parking provision available in publicly accessible offstreet car parks in and around Grangemouth town centre.

Table 2-1: Publicly accessible Grangemouth town centre car parking context

Parking type	Off-Street Car Park	Capacity	Time Restrictions / Charges
	Union Road	251 spaces and 12 disabled spaces	None
Falkirk Council Off- Street Car	Talbot Street (West)	42 spaces including 3 disabled spaces 3 taxi bays and an additional taxi rank area	None
Parks	Talbot Street (East)	73 spaces	None
Privately Operated	B&M ¹	93 spaces including 5 disabled bays and 9 parent and child bays	None
Off-Street Car Parks	Asda	430 spaces including 25 disabled bays	None

- 2.6.2 As demonstrated in **Table 2-1**, parking within Grangemouth town centre is plentiful and easy to use. There are almost 900 car parking spaces available in off-street car parks, all of which have no time restrictions or charges in place.
- 2.6.3 **Table 2-2** summarises the on-street parking capacity on streets in and around the town centre. These capacities represent an estimation only and exclude sections of streets where there are clear parking restrictions in place (e.g., double yellow lines) or physical barriers (e.g., footways, or road width constraints). A map showing the location of the streets is provided in Figure 2-20.

Table 2-2: Summary of estimated on-street parking capacity in and around town centre

Street	Estimated capacity ¹
Annfield Place ²	0
Bo'ness Road (parallel street)	24
Creteil Place	12

Street	Estimated capacity ¹
Dundas Street	30
Dundas Street (side street)	74
Forth Street	15
Kerse Road	83
Library Lane	5
Lumley Court	41
Lumley Place	36
Lumley Street	37
Lumley Street (side street)	67
Marshall Street	20
Talbot Street	39
Troupe Court	40
Union Road Flats	26
Union Road Shops	41
Ure Court	41
York Arcade	52
Total	683
Notes:	

¹ Excludes sections of streets with clear parking restrictions present or physical barriers which would otherwise prevent parking including double yellow lines, single yellow lines, zig zags, taxi ranks, driveways, footways, and road width constraints. Informally signed restrictions such as 'residents parking only' or 'staff parking only' have been included in capacity calculations. ²No available parking provision that is not on a footway.

- 2.6.4 As illustrated in **Table 2-2**, it is estimated that there is capacity for around 680 vehicles to park on streets in the vicinity of the town centre. Aside from Union Road and Bo'ness Road where on-street parking is prohibited, unrestricted on-street car parking is possible on most streets around the town centre.
- 2.6.5 It is worth noting that the town centre is adjacent to residential properties, including flats; most of which lack driveways. Consequently, some residents with cars may rely heavily upon onstreet parking provision.

Parking Demand Surveys

- 2.6.6 Car park occupancy and parking beat surveys were undertaken on 23 January 2025 (Thursday), and 25 January 2025 (Saturday) to understand existing parking demand in the vicinity of Grangemouth town centre. The surveys were undertaken during the following times and intervals:
 - Off-street car park occupancy surveys: between 07:00 and 19:00 at 30-minute intervals captured using CCTV cameras
 - On-street car park beat surveys: between 07:00 and 19:00 at hourly intervals captured directly by enumerators.
- 2.6.7 A map showing the surveyed areas is shown in Figure 2-20. The ASDA car park was excluded from the survey given that it is privately owned and operated.

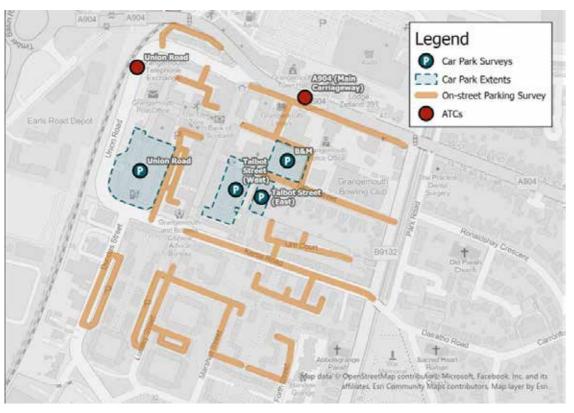


Figure 2-20: Surveyed parking areas

- 2.6.8 It is worth noting that there was an unexpected red weather warning present on Friday 24th January. Although this did not coincide with the survey days, it had the potential to impact the representativeness of the captured data.
- 2.6.9 Traffic flow data was therefore extracted from a nearby traffic counter (JTC00469) on the M9 in Grangemouth from the National Transport Scotland database. This analysis demonstrated that traffic flow levels captured on Saturday 25 January were in line with the previous three Saturdays in January, suggesting that the captured data was broadly representative of typical conditions.

Off-Street Car Park Survey Results

2.6.10 **Table 2-3** presents the minimum, average and maximum recorded occupancy rates of the off-street car parks surveyed.

Table 2-3: Car Park Survey Results (Max / Min recorded across Thursday and Saturday)

	Th	ursday 23/01	/25	Saturday 25/01/25		
Surveyed Car Park:	Min % Occupancy	Average % Occupancy	Max % Occupancy	Min % Occupancy	Average % Occupancy	Max % Occupancy
B&M	4%	38%	67%	3%	28%	52%
Talbot St East	0%	12%	33%	2%	12%	36%
Talbot St West	23%	56%	88%	25%	63%	100%

	Th	ursday 23/01	/25	Saturday 25/01/25		
Surveyed Car Park:	Min % Occupancy	Average % Occupancy	Max % Occupancy	Min % Occupancy	Average % Occupancy	Max % Occupancy
Union Road	2%	26%	50%	2%	21%	43%
Total (combined)	6%	32%	56%	7%	28%	52%

- 2.6.11 As demonstrated in **Table 2-3**, the total maximum recorded occupancy across the four car parks was 56% (256 vehicles) on Thursday, and 52% (238 vehicles) on Saturday, meaning over the span of the survey period just under half of the parking spaces available remained unused
- 2.6.12 Talbot Street West car park had the highest utilisation, with a maximum occupancy of 100% recorded during the Saturday survey. Talbot Street East car park was the least utilised, with a maximum occupancy of 36%. Union Road is the largest car park and had the highest volume of vehicles recorded, however it was only 50% utilised (126 vehicles) during its busiest time. Talbot St West is likely the busiest car park due to the vicinity of shop access, and residential properties. The car park does not have any restrictions on parking which would allow residents to park for access to their property, while also be used for access to the retail units. Talbot St East is potentially low in occupancy due to being further away from the retail and residential units. Furthermore, this car park does not have any signage present, which may confuse the user on ownership and access restrictions, which may result in people choosing not to park here.
- 2.6.13 **Figure 2-21** and **Figure 2-22** presents the car park usage broken down by half hourly intervals for Thursday and Saturday respectively.

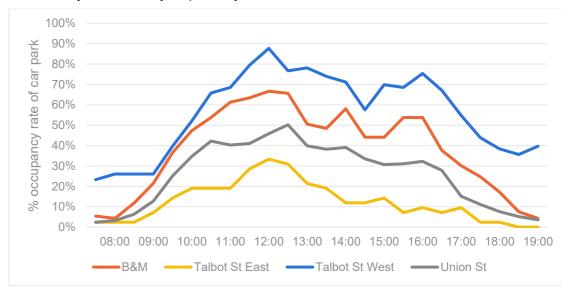


Figure 2-21: Car Parking Occupancy Profile - Thursday 23/01/25

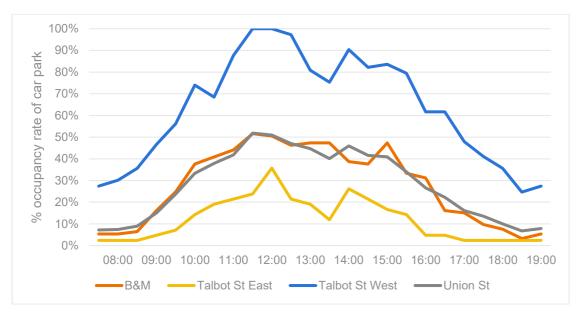


Figure 2-22: Car Parking Occupancy Profile – Saturday 25/01/25

2.6.14 As shown in **Figure 2-21** and **Figure 2-22**, the busiest period for all four car parks across both days was between 11:00 and 12:00. All car parks followed the same trend, with demand increasing after 09:00 and significantly dropping after 16:00.

Parking Beat Survey Results

2.6.15 The results of the on-street parking beat surveys are shown in **Table 2-4**. A map showing the location of the streets is provided in **Figure 2-20**.

Table 2-4: On-street parking beat survey results

	Th	ursday 23/01	/25	Sa	aturday 25/01	/25
On-street location	Min % Occupancy ¹	Average % Occupancy ¹	Max % Occupancy ¹	Min % Occupancy¹	Average % Occupancy ¹	Max % Occupancy ¹
Annfield Place			See I	Vote 2		
Bo'ness Road (parallel street)	21%	49%	75%	25%	47%	71%
Creteil Place	42%	54%	67%	50%	65%	75%
Dundas Street	40%	68%	110%	47%	70%	90%
Dundas Street (side street)	34%	45%	54%	35%	47%	54%
Forth Street	33%	60%	87%	40%	47%	60%
Kerse Road	19%	30%	40%	28%	32%	39%
Library Lane	0%	62%	100%	0%	13%	80%
Lumley Court	7%	13%	29%	20%	25%	37%
Lumley Place	25%	41%	56%	44%	57%	69%
Lumley Street	49%	57%	68%	51%	66%	78%
Lumley Street (side street)	28%	36%	40%	46%	52%	55%
Marshall Street	10%	13%	25%	15%	23%	30%
Talbot Street	18%	26%	31%	21%	26%	33%

	Th	ursday 23/01	/25	Saturday 25/01/25		
On-street location	Min % Occupancy ¹	Average % Occupancy ¹	Max % Occupancy ¹	Min % Occupancy¹	Average % Occupancy ¹	Max % Occupancy¹
Troupe Court	28%	40%	53%	40%	48%	58%
Union Road Flats	15%	27%	35%	27%	35%	38%
Union Road Shops	24%	38%	46%	32%	38%	46%
Ure Court	29%	39%	61%	37%	59%	71%
York Arcade	21%	50%	79%	13%	55%	88%
Total (combined)	35%	40%	44%	42%	47%	52%

Notes

- 2.6.16 As shown in **Table 2-4**, a reasonable availability of on-street parking was recorded across both survey days. The total maximum recorded occupancy was 52%, meaning around 327 on-street spaces were available.
- 2.6.17 Dundas Street was the only street recorded as being overcapacity in the survey, with a maximum occupancy rate of 110%. Union Road flats had the lowest maximum occupancy rate, with 23% of the 43 available spaces occupied.
- 2.6.18 **Figure 2-23** presents the on-street parking usage broken down by hourly intervals for the two surveyed days.

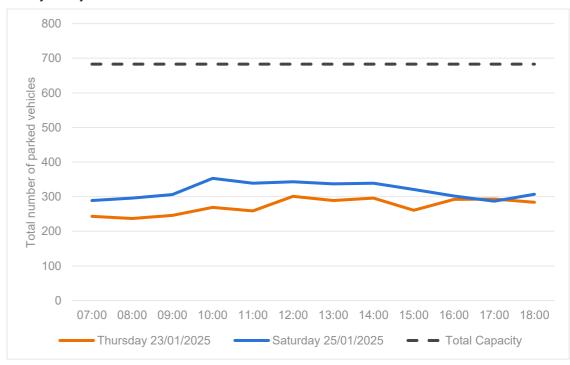


Figure 2-23: Summary of total combined on-street parking occupancy

2.6.19 Figure 2-23 demonstrates that parking demand remained relatively steady throughout the surveyed days, with minimal fluctuations. The maximum range recorded across the two survey days was 56 vehicles, suggesting that most people parking on-street in and around the town centre are residents without access to a driveway or staff working at town centre retail units.

¹Figure represents a percentage occupancy of the maximum calculated parking capacity of the street. This excludes sections of streets with clear parking restrictions present or physical barriers.

²It is not possible to calculate an occupancy percentage for this street as the total parking capacity of the street is null. Parking that occurs on this street occurs on footways which is not considered to be a permissible location to park.

2.7 Commercial Traffic

- 2.7.1 The proximity of industrial land uses (e.g. Whyte and Mackay) and Forth Ports Grangemouth mean that roads in and around the town centre are frequently accessed by commercial traffic, including Heavy Goods Vehicles (HGVs).
- 2.7.2 Bo'ness Road (A904) is subject to an environmental related 7.5t weight limit, which restricts HGV routing (except for access) between Union Road and Powdrake Road. This means HGVs cannot cross the town centre in an east-west direction and are instead required to use alternative routes, including to access the Port.
- 2.7.3 Union Road is a key access route for HGVs given it is the only means of accessing the Whyte and MacKay site and adjacent industrial land uses without routing via residential streets to the south of the town centre, such as Wallace Street or Newhouse Road.
- 2.7.4 To better understand HGV usage through the two key routes in Grangemouth town centre, seven-day Automatic Traffic Count (ATC) surveys were undertaken at two locations, Bo'ness Road (A904), and Union Road, between 20 January 2025 and 26 January 2025 (locations shown in **Figure 2-20**).
- 2.7.5 The ATC results are shown in **Table 2-5**. Note that due to a red weather warning, data collected on Friday 24 January has been removed as it is not representative of typical traffic conditions.

Table 2-5: ATC Summary

Survey location		Daily two-way traffic flows		
		Weekday average ¹	Sat	Sun
Bo'ness Road (A904)	MGV ²	94	50	24
	HGV ³	18	3	5
	Total Vehicles	8256	5727	4749
	% MGV and HGV	1%	1%	1%
Union Road	MGV ²	135	71	43
	HGV ³	60	8	4
	Total Vehicles	3746	3008	1887
	% MGV and HGV	5%	3%	2%

Notes

- 2.7.6 **Table 2-5** demonstrates that both MGVs and HGVs regularly use Bo'ness Road and Union Road, with higher volumes recorded on weekdays compared to weekends. There is evidence to suggest that the weight restriction present on Bo'ness Road is not adhered to given that a combined total of 112 MGVs and HGVs were recorded on an average weekday using this road.
- 2.7.7 The town centre and wider Grangemouth area is covered by a waiting prohibition for HGVs which means there is no parking allowed within this area. Anecdotal evidence provided to Stantec suggests that this prohibition is not always adhered to as overnight parking can occur in and around the town centre.

3 Strengths, Weaknesses, Opportunities and Threats Analysis

3.1.1 Drawing on the key findings presented in Chapter 2, **Table 3-1** summarises Grangemouth town centre's key strengths, weaknesses, opportunities, and threats (SWOT), relating to transport.

¹Excludes Friday due to a red weather warning being in place.

²Medium Goods Vehicle in this case are defined as a three-axle rigid truck or bus or four axle rigid truck which are likely to exceed the 7.5t environmental weight restriction in place on Bo'ness Road. It excludes two axle trucks / buses as these are unlikely to exceed the 7.5t weight restriction. Based on observations, most buses operated by McGill's in Grangemouth are two axle and therefore are excluded from this figure for MGVs.

³Heavy Goods Vehicle in this case are defined as a three or more-axel articulated or rigid vehicle and trailer which are all considered likely to exceed the 7.5t environmental weight restriction in place on Bo'ness Road.

Table 3-1: Grangemouth Town Centre Transport-Related SWOT Analysis

Strengths

- Natural and Green Spaces: The town centre is adjacent to an abundance of green spaces such as Zetland Park which are pleasant environments that complement active travel.
- Access to cycle network: NCN76 already runs through the town centre, providing a key link to the east and west and to residential areas at the edge of the town.
- Flat topography: The area surrounding the town centre is flat which naturally lends itself well to active travel.
- Environmental weight restrictions: There are already environmental weight restrictions present which restrict HGVs from routing along Bo'ness Road.

Weaknesses

- Railway line severance: The railway line to the west of the town centre disrupts active travel connectivity to the west.
- High traffic volumes, including HGVs: Bo'ness Road and Union Road have high traffic volumes, including HGVs despite weight restrictions being present. This detracts from the active travel experience.
- Poor cycling infrastructure: Existing cycling infrastructure in and around the town centre generally has a low level of service according to Cycling by Design guidance.
- Bus stop accessibility: Some town centre bus stops are inaccessible for those in wheelchairs given their lack of integration with the surrounding network.
- Sub-standard crossing facilities: Existing infrastructure in the town centre is constrained, especially for those with mobility impairments.
- Public transport connectivity: The town centre is largely inaccessible by public transport for those living outside Grangemouth, Falkirk and Bo'ness

Opportunities

- New active travel connections: such as improved connections within the town centre, connecting Helix Park through the town centre and onwards to Zetland Park.
- Enhanced active travel infrastructure: principally to improve safety, coherence, inclusivity and reduce conflict for people walking, wheeling and cycling, such as through segregated cycleways.
- Public transport improvements: There is opportunity to improve bus stop waiting facilities in the town centre, including providing real time information at stops to encourage bus use. There are also wider strategic opportunities to improve public transport.
- HGV management: Such as through greater enforcement of existing HGV weight restrictions, or the provision of new or amended restrictions in and around the town centre.
- Parking: Parking surveys suggest there is a reasonable availability of parking spaces in and around the town centre which may present an opportunity for re-purposing land uses or reallocating road space.

Threats

- HGV traffic and industry impact: Industrial activity could continue to create safety and environmental concerns relating to the impact of HGVs.
- On-street parking reliance: Most existing
 households near the town centre are either flats or
 terraced housing which results in an increased
 dependency upon residential on-street parking.
 Furthermore, due to poor public transport options,
 residents and visitors are reliant on cars meaning car
 park allocation within the town centre will be required.

4 Future Movement and Parking Vision

4.1 Overview

- 4.1.1 As identified in the main Masterplan document, it is intended that the character and function of Grangemouth town centre will grow and evolve. There will be greater diversity of land uses provided, including the likelihood of a reduced retail offering and increased town centre living and civic spaces for residents.
- 4.1.2 This transition for the town centre will significantly impact transport, movement and parking as discussed in this Chapter. As the town centre grows and evolves, it is essential to develop an integrated approach that balances the needs of pedestrians, cyclists, public transport users, commercial traffic, and car users in line with the national transport hierarchy. By improving movement patterns and optimising parking, a more pleasant and people-friendly environment. This vision not only supports the town's economic and social objectives but also aligns with broader environmental goals.

4.2 Active Travel

4.2.1 As highlighted within the Masterplan, there is an aim to prioritise pedestrian movement throughout the town centre through transforming traffic dominated roads and car parks (where practical) to streets and squares which are inherently more people friendly places. As shown in **Figure 4-1**, the Masterplan proposes a network of key pedestrian routes to connect to adjacent land uses and to the Town Square.

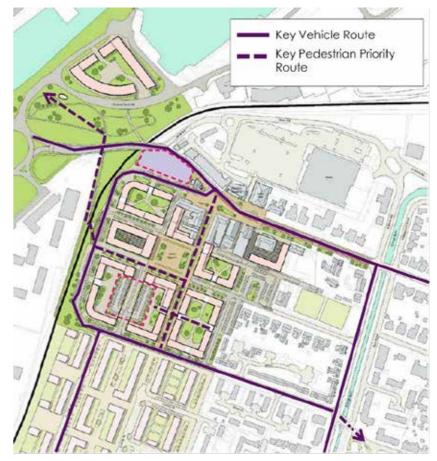


Figure 4-1: Town Centre Masterplan - Pedestrian Priority

4.2.2 A further key focus of the movement strategy is to enhance connectivity for people walking and wheeling to and from the waterfront. This is partly due to the regeneration proposals included in

- the Masterplan which is likely to increase leisure and recreational activities in and around the Docks, but also to improve the accessibility of the town centre for residents and visitors alike, including from Glensburgh and the Helix Park.
- 4.2.3 To realise this vision, it is crucial to overcome the severance barrier presented by the railway. Any new or upgraded crossing must be fully accessible for people walking, wheeling and cycling. Should the STAG-based Grangemouth Transport Study progress in future, options to deliver upgraded crossings of the railway should be explored further as part of a preliminary and detailed appraisal process.
- 4.2.4 To the east of the town centre, the vision is to upgrade active travel connections between Zetland Park and the town centre given the park's standing as a key attraction and focal point for existing active travel routes. Kerse Road would be a natural key focus for any improvements made
- 4.2.5 It is important that cycle infrastructure in and around the town centre is upgraded to provide a safer and more pleasant environment for people cycling and harness the potential of existing surrounding cycle routes, including NCN76. In addition and to complement connectivity enhancements across the railway line, upgraded cycling infrastructure could also be considered on key routes such as Bo'ness Road (A904) and Kerse Road to create a traffic-free environment for all cyclists.

4.3 Public Transport

- 4.3.1 The public transport vision for the town centre is to create a seamlessly integrated network that is easy and convenient for everyday journeys for residents and visitors alike. Upgrading bus stop infrastructure should be a key focus, including upgrading waiting facilities, bus shelters, and providing real-time passenger information systems at stops to enhance the bus passenger experience.
- 4.3.2 The town centre's bus network will need to connect with the surrounding walking and wheeling network, including new crossing facilities and footway widening to improve accessibility to and from bus stops.
- 4.3.3 The Grangemouth Transport Study Initial Appraisal Case for Change (2024) study has explored more strategic opportunities related to major upgrades to public transport, which are included as part of the long list of options. Should the Grangemouth Study progress in future, these options will be explored further as part of a preliminary and detailed appraisal process in partnership with wider stakeholders such as Transport Scotland, Scotrail, Network Rail and McGill's.

4.4 Traffic and Parking

- 4.4.1 Acknowledging their strategic importance, traffic would continue to be permitted on key thoroughfares around the edge of the town centre, including Union Road and Bo'ness Road (A904). However, to create more people-friendly spaces, there will be a need to reduce the dominance of traffic such as through further measures to discourage HGVs from using Bo'ness Road and reducing traffic within the town centre core, including in proximity to the town square.
- 4.4.2 Through the changes in land use identified in the Grangemouth Town Centre Masterplan, the town centre will see a shift from primarily retail and commercial uses to residential units. With this change in land use, there is likely to be a change in travel patterns resulting in a change in the demand for parking (during the day, but particularly overnight).
- 4.4.3 There will be a decrease in retail offering which may reduce the need to maintain the existing level of parking however, residential use brings different requirements and demand for parking. Due to limited public transport accessibility, it is likely that residents will be reliant on private cars to access amenities outside of Grangemouth such as work, education, and leisure. Therefore, it is likely that there will be high demand for parking associated with any future residential units.

- 4.4.4 The specific details of the type of residential units are yet to be determined, including the details of the levels of expected parking provision. Once details have been confirmed, the parking provision will be determined in line with parking standards, currently identified in the Falkirk Local Development Plan and supporting National Roads Development Guide. Any off-street parking provided as part of the future residential development is likely to be surface level car parking. However, there is also potential to explore underground parking as a way to reduce the visual impact of cars in the town centre.
- 4.4.5 As indicated in the Masterplan, there is the possibility that the Union Road Car Park may eventually be redeveloped for alternative land uses. Any closure of the car park would be subject to more detailed investigations and analysis to determine its feasibility and if it were to proceed, would be undertaken as the very last delivery phase once the impacts were clearly understood.
- 4.4.6 The Masterplan incorporates an alternative potential location for an alternative car park / mobility hub located in a parcel of land between Union Road and Bo'ness Road (A904) which could be considered (see **Figure 4-2**). Should the STAG-based Grangemouth Study progress in future, this option will be explored further as part of a preliminary and detailed appraisal process.



Figure 4-2: Indicative parking option with additional car park / mobility hub

5 Recommended Next Steps

- 5.1.1 As a short-term priority, it is recommended that Falkirk Council advance the **Grangemouth Transport Study Initial Appraisal Case for Change (2024)** to the preliminary and detailed appraisal stages. In collaboration with key stakeholders, such as Transport Scotland and local business groups, this next phase would involve appraising the merits of a long list of potential local and strategic transport option interventions within and around the town centre; including those that have been identified in this Technical Note.
- 5.1.2 Key <u>potential options</u> relevant to the town centre which are all required to be **subject to further preliminary and detailed appraisal** include:
 - Enhance the inclusivity of walking and wheeling infrastructure, including the provision of dropped kerbs, tactile paving, and refuge islands at crossings.
 - New and upgraded crossing facilities at various locations along the NCN76, such as on Bo'ness Road.

- New or enhanced active travel crossing of the railway to the west of Grangemouth town centre, allowing improved access between the waterfront and the town centre
- Upgrades to cycle infrastructure in and around the town centre, potentially as part of new cycle routes
- Upgrades to bus stops and bus shelters to a higher quality / level of service
- Review the wider Falkirk bus network to understand any opportunities / changes that can be made to improve the service locally
- Provision of real-time bus passenger information at key stops in Grangemouth.
- Improve compliance of current HGV weight restrictions in the town (e.g. Bo'ness **Road)**, such as through enhanced signage or improved information provision
- Alternative town centre car park / mobility hub, located to the north-east of the town
- Work with local bus operators to deliver new or upgraded bus services which makes Grangemouth more accessible from a broader range of destinations
- Work with partners, including Transport Scotland and Scotrail, to explore potential of a passenger rail station and rail service in Grangemouth

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