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CIVITAS PORTIS TRANSFERABILITY

INSIGHTS INTO THE IMPLEMENTATION OF SMART MOBILITY MEASURES

ABERDEEN MOBILITY MEASURE INTEGRATED CORRIDOR MANAGEMENT



A publication by the CIVITAS PORTIS consortium

MOBILITY MEASURE INTEGRATED CORRIDOR MANAGEMENT

WHAT IS IT ABOUT?

This measure focuses on the optimisation of the collective transport network at a distinct geographic corridor from Aberdeen City Centre, along the A96 to Inverurie which is one of the key commuter corridors. Collective travel refers to sustainable transport including public transport, shared transport and active travel. The latter has primarily been considered in the context of 'last mile' journeys i.e. focused on improving connection to transport interchanges, hubs and other key destinations on the corridor.

By 'redesigning' the collective travel, thus transforming the A96 corridor into a 'best quality collective transport corridor', Aberdeen City Council aims to make collective travel the main mode of choice in the A96 corridor between key settlements and employment areas, rather than single occupancy car trips.

KEY ELEMENTS

Focused analysis of current usage of the corridor by all modes and clear choices in the use of sustainable modes: public transport, active travel and park & ride:

- Analysis of trip data, activities along the corridor, existing travel behaviour;
- New route hierarchy to support collective and active travel;
- Development of a new collective travel route map along with service providers which meets the needs of current and future collective travel users along the A96 corridor;
- Implementation of appropriate road infrastructure and efficient traffic management to directly support new collective (and active travel) transport services;
- Implementation of 'soft measures': Work with service providers and travel planning officers to develop and implement efficient supporting initiatives;
- Develop the facilities at the A96 Park and Ride at Craibstone and implement;
- Implementation of communications and marketing strategies to support this work.



CONTEXT & CHALLENGES

Aberdeenshire has the highest rate of car ownership in Scotland. A high proportion of journeys within Aberdeen are undertaken by single occupancy vehicles, although a third of households in Aberdeen have no access to a car and rely on collective travel to education and employment.

Significant existing and increasing single occupancy car trips are generated by the growing employment centred on Dyce and Aberdeen International Airport, which are both in reasonable proximity to Dyce Rail Station and the A96 Park and Ride at Craibstone.

The A96 is the trunk road linking the cities of Inverness and Aberdeen.

As we continue to grow this city region and therefore the regional economy, there are several new housing and office allocations proposed. New housing developments are being built on the A96 Corridor, which will put increased demand on transport infrastructure; and modelling indicates this can also lead to an increase in journey times, especially during peak times. Air quality management areas exist in the City Centre, and on two locations on the strategic network at Wellington Road / A956 (north end) and Haudagain Junction at the intersection of the A92 and A96, reflecting the significant levels of congestion in the peak periods on the main strategic routes into the City and in particular around the City Centre.

The significant housing and employment growth foreseen along this road corridor precipitated planned transport improvements. Several developments are planned from Union Street in the city centre along the A96 road to the



neighbourhood of Dyce, Aberdeen International Airport, and further out towards the Aberdeenshire towns of Blackburn, Kintore and Inverurie.

The 1 000 space Dyce Park and Ride site near Aberdeen International Airport and Dyce business park along the A96 corridor has also recently opened. This site has electric charging infrastructure and parking spaces for bike, which have an opportunity to make this a 'Collective Gateway'. The 'Gateway' should be a transport interchange that welcomes people to Aberdeen and offers information on travel opportunities across the city and region. In addition, it should inform visitors about the park and choose facilities and potential future cycle hire scheme at Dyce itself.

Perception of Public Transport Provision in Aberdeen City Region

The perception of public transport is it is often seen as uncompetitive due to long/unreliability of journey times and relatively high-ticket prices and lack of quality interchanges.



It should be noted that the public transport and rail network were privatised in the UK and as such the local authorities (with the exception of Transport for London which is devolved) have no ownership or control of these services. Some bus routes may be subsidised to ensure the service, should it be deemed a priority route to local communities, continues to run.

Rail Network

The Aberdeen rail network currently only has two main corridors. These routes serve to the North (Inverness) and to the South (Edinburgh/Glasgow/London). These corridors do suffer from overcrowding in the peak period and further land use development may add to the pressure on routes.

Rail patronage in the region shows significant growth levels. Improvements to the rail corridor between Aberdeen and Inverness (which is the A96 Corridor) was undertaken by Network Rail and there is the opening of the new Kintore Rail Station (due to open summer 2020) also on the A96 Corridor; these are expected to promote rail patronage on the A96 corridor, reducing the need for private vehicle trips to the city centre. Nestrans, regional transport planner, as part of PORTIS undertook rail promotion of the corridor improvements.

NESTRANS, REGIONAL TRANSPORT PLANNER, AS PART OF PORTIS UNDERTOOK RAIL PROMOTION OF THE CORRIDOR IMPROVEMENTS.



Interaction with measures/evolutions outside CIVITAS PORTIS

- Completion and operation of the Aberdeen Western Peripheral Route (AWPR) - the construction and completion of the AWPR has been identified as holding opportunities to redeploy and prioritise freed up road capacity within the City for active and sustainable transportation modes;
- Continued implementation of the City Centre Masterplan (CCMP) - the CCMP has identified various walking and cycling projects to improve the pedestrian and cycling environment in the City Centre, such that it is easy and attractive to walk and cycle around;
- Continued implementation of the current iteration of the Local Transport Strategy (LTS) for the city (2016-2021) - the LTS is predicated on the construction and completion of the AWPR and the opportunities it affords to redeploy and prioritise freed up road capacity within the City for active and sustainable transportation modes.



MAIN ACTIVITIES

- Undertake a multi-modal study on Collective Travel measures on the A96 transport corridor between Inverurie and Aberdeen City Centre:
 - Baseline data for monitoring purposes throughout the Civitas Portis programme
 - Analysis of travel demand on the corridor and potential scenarios
 - Development of a Collective Travel Route Action Plan for the A96 between Inverurie and Aberdeen
- Increased signage to encourage users to park at Craibstone and take the P&R into town. This is obviously important to try and reduce the number of vehicles coming into the city centre as well as to help encourage multi-modal journeys.
- Provide for new cycle parking on A96 Corridor: in conjunction with cycling groups, ACC's Traffic Safety, Road Maintenance and Built Environment teams cycle racks were installed at five locations.
- Implementation of new cycle maintenance stations on A96 corridor: lack of facilities along the corridor was seen as a barrier to cyclists therefore, along with the cycle parking, cycle maintenance stands were installed at four key locations. These provide cyclists with an air pump and various maintenance tools, located conveniently adjacent to existing cycle lockers.
- Wayfinding signage around Dyce: new walking and cycling direction signs were installed in Dyce, to increase user awareness of key interchange points (such as train station and Craibstone P&R) and make them feel more confident to walk and cycle to their destination rather than take the car.
- Travel Planning at Dyce and associated actions: A consultancy firm targeted four of the larger businesses in the same geographical area as models, thereby using the experiences learned in a more focussed group to expand to the whole area. This resulted in an action plan of both hard and soft measures, identifying key areas for improvement for collective travel.
- New electric car charging points plus a Co-Wheels car (a pay-as-you-go car hire scheme) to try and reduce the need for private car ownership and there is evidence to suggest it also helps encourage active travel.
- Provision of four bus shelter 'ereaders': supplying live timetable information but also indicating road closures or service disruptions, and can also be used to promote events, tariffs, etc.
- Parking restrictions on Auchmill Road: The Action Plan noted walking was restricted due to vehicles parked on the footway. Therefore, actions will be taken to prevent vehicles from doing this, ensuring a safe walking space.
- Promotion of Rail Services on A96 corridor: Following the dualling of the Aberdeen to Inverurie railway line, a new rail timetable was introduced by the operator in December 2019, leading to an increase of provision of 59%. Additionally, a new station is due to be opened in May 2020 at Kintore which is a commuter town on the A96 corridor. Promotional activities will be held when the station opens. This is also expected to help reduce the number of vehicles coming into the city centre either for work or leisure.
- Creation of a Park and Ride Website: Lack of awareness of the facilities provided at various Park and Ride sites was found. Therefore, a dedicated website was created, which acts as a 'one stop shopping' solution for park and ride information – not only listing the facilities at each site but also the bus timetables and fares available.
- Creation of link paths off Auchmill Road to be undertaken improving the Core Path network and providing better linkages onto the A96 and thus promoting walking and cycling.

NEW ELECTRIC CAR CHARGING POINTS PLUS A CO-WHEELS CAR (A PAY-AS-YOU-GO CAR HIRE SCHEME) TO TRY & REDUCE THE NEED FOR PRIVATE CAR OWNERSHIP



BENEFITS & COSTS

Benefits

With the number of major changes on the A96 Corridor such as the AWPR, opening of P&J Live Conference Arena and rail improvements as some examples there were changes in traffic patterns. The blockades during the rail improvements saw an increase in active travel, and the rail upgrades provided significant modal shifts. We have observed that more people were recorded cycling, which may be accounted for by significant congestion caused by the construction of P&J Live and Haudagain Junction Improvements, encouraging the modal shift. The implementation of the bike parking and bike maintenance hubs have been well received to date.

We should note that, also due to the global pandemic caused by COVID-19, it was difficult to measure the true impact. We anticipate that, with the measures implemented as part of PORTIS as well as continuing improvement plans for the A96 corridor, there will be longer term impacts beyond PORTIS.

In the long term, the measures and other complementary projects are believed to have the following benefits:

Society:

- Increase in awareness of target population aware of measures being implemented
- Increase in percentage of population favourably receiving or approving of the measures being implemented
- Increase in perception of quality of service

Transport:

Change of:

- Average modal split - trips
- Average modal split - passengers
- Average modal split – vehicle km
- Modal split of employees

Resulting in:

- 20% reduction in City Centre traffic
- 20% increase in cycling and walking
- 5% increase in peak time collective travel
- Improved journey times and a reduction in delays across Aberdeen City (including freight)
- 15% less car use in travel to work

Resources

Several resources were required to deliver this measure, including local authority officer time, for procurement and administration, suppliers and installers. Specifically: Aberdeen City Council (ACC) - transport officers, with external consultancy support, produced a baseline review of the A96 corridor and developed an action plan of measures:

- EV charger and car - Co-Wheels (a car hire-club) supplied / delivered the car hire vehicle, EV charger installed by specialist installer and connection required services of the local electrical network operator.
- Bus infrastructure e-readers (electronic timetables) - required public transport operator (and city council Public Transport Unit officers) and bus e-reader supplier involvement.
- Cycle parking and maintenance stands – cycle parking installers and manufacturers.
- Travel Planning Study – ACC transport officers working with representative businesses in the Dyce area.
- Wayfinding / signposts – ACC officer time and signpost suppliers
- Analysis of trip data, activities along the corridor, existing travel behaviour
 - Annual car occupancy count being undertaken and forwarded for evaluation
- New route hierarchy to support collective and active travel
 - Report by consultants (£85k – approx. € 93 000) producing collective travel report and action plan of measures (currently being implemented)
- Implementation of appropriate road infrastructure and efficient traffic management to directly support new collective (and active travel) transport services
 - List of project measures; travel planning study, cycle parking, cycle/walking signage and maintenance stands, electric vehicle (car club car) and charging point installed. (Approximate value £120k – € 130 000)
- Efficient supporting initiatives by service providers and travel planning officers
 - Marketing and promotional material – 7.5k (+/- € 8000)

USERS & STAKEHOLDERS

Users:

- Residents
- Car drivers/motorists
- Commuters
- Local businesses
- General public

The A96 Corridor runs from City Centre at Broad Street to Inverurie, encompassing key settlements and employment areas within the corridor. Specifically: Oldmeldrum, Kemnay, Kintore, Blackburn, Bucksburn, Dyce and Stonemywood.

Lessons learnt were taken from the Civitas Portis measure on travel planning with primary business areas in Aberdeen and then applied to selected businesses in Dyce. This is an example of how a 'template' was created during PORTIS which can be applied to other parts of the city.

Specific user groups were targeted, demonstrating the advantages of collective travel by providing priority measures, advice and information to those users. Focus groups were organised for discussions with members of the public (both car users and non-car users), gauging possible future use of transport services and identifying barriers to increasing use of collective travel options. In ensuring the proposed solutions are fit for purpose, they are more likely to be accepted by stakeholders and the wider public, which is what would be expected as a course of conduct in a robust project.



Stakeholders:

- Aberdeen City Council (ACC): responsible partner for the measure
- Robert Gordon University: Evaluation and local validation partner
- Aberdeen Council (ASHIRE): Co-ordination with region
- Nestrans (Regional Transport Partnership): Regional transport input
- Transport Scotland: Representing national road authority
- Abellio: Rail operator
- North East of Scotland Quality Bus Partnership: input
- Sustrans (Scottish charity fostering walking and cycling): Input
- Aberdeen Airport
- NHS Grampian
- Inverurie Community Council
- Disability Equity Partnership
- Police Scotland
- Aberdeen Cycle Forum
- Grampian Cycle Partnership



A number of stakeholder consultation workshops were organised – this involved discussions with key stakeholders including public transport operators, aiding understanding of operations and limitations of use from public and private sector perspectives. This led to the identification of issues and opportunities. Next to that, interviews were being carried out with stakeholders and representatives of key organisations. Useful comments and suggestions made by stakeholders, leading to changes in design, and thus ensuring the proposed solutions are fit for purpose, leading to an increased acceptance by stakeholders.



FROM CONCEPT TO REALITY

Implementation within the measure took a two stage process, the first of which dealt with milestones during the first 18 months of the project. These included the current collection of baseline information, and the mapping of existing or committed infrastructure. The framework for a new road hierarchy receive political approval in 2017, followed by implementation of initiatives to develop a collective gateway during year three and four of the project.

Preparation:

Design and planning (18 months):

- Establish a new roads hierarchy (M12)
- Baseline information (M18)
- Mapping of committed transport infrastructure, including future housing and employment along the corridor (M18)
- Forecast future travel demand to inform a collective travel route map (M18)

A new collective travel route map was established, which incorporated the baseline information, committed infrastructure commitments and forecasted travel demand to form an action plan list for the A96 List. A series of consultation meetings were then held with key stakeholders to decide which schemes to take forward within the PORTIS timescales.

Implementation: (year 2-3)

Implementation of collective travel

- Develop and implement a “Collective Gateway” at A96 Park and Ride (M32): Consultant appointed to undertake Park and Ride study on behalf of Nestrans
- A Travel Planning consultant was appointed who developed an action plan and 3-year promotional programme to encourage active travel in and around the A96 area (primarily Dyce). This activity took lessons learnt from the CIVITAS PORTIS measure ‘Developing Travel Plans’, that encompasses working on tailor-made sustainable travel plans with local businesses in some of Aberdeens primary business districts, s.a. the Dyce area.
- Develop and implement a communications and marketing strategy for the “Collective Gateway” (M44)
- Develop and implement road infrastructure and traffic management improvements to support collective travel along the corridor (M44)

A number of measures have been implemented on the A96 Corridor which include an EV Charge Point and the introduction of an additional EV to Co-Wheels (a pay-as-you-go car hire scheme) to support the expansion of Aberdeen’s car hire scheme, Cycle Parking, Cycle Hubs, Missing Active Travel Links and E-Readers (supplying live timetable information but also indicating road closures or service disruptions, and can also be used to promote events, tariffs, etc.) at selected, strategic bus shelters. Additional signage in the Dyce area has been erected and it is anticipated that this measure could link to a bike hire scheme when it is implemented in Aberdeen city. A new P&R website has been launched which has proved extremely well used, offering one stop shop for P&R info.

A NEW COLLECTIVE TRAVEL ROUTE MAP WAS ESTABLISHED, WHICH INCORPORATED THE BASELINE INFORMATION, COMMITTED INFRASTRUCTURE COMMITMENTS AND FORECASTED TRAVEL DEMAND

Operations and future plans: (year 3-4 and beyond CIVITAS PORTIS)

Getting a number of the quick wins in and PORTIS has started to get the ball rolling with a number of other plans- one of which is an Active Travel Hub, providing community groups and local business with support and information to help make our communities healthier by changing travel habits and encouraging people to become more active. The legacy and long-term plans for the corridor are quite exciting.

To ensure the continuation of this measure, Aberdeen City Council has:

- Built identified projects into the transport programming
- Built in projects to the Active Travel Action Plan
- Monitored the measures which have been implemented to date to analyse their impact

Some of the future actions to be implemented are:

- The proposed express bus service from Craibstone to the city centre was not implemented during the lifetime of PORTIS as it exceeded the available funding, however, through PORTIS, there was the opportunity to develop a business case as ACC was been successful for national funding to continue to develop this piece of work.
- A campaign is planned to promote the rail improvements on the A96 Corridor- this is the opening of the new rail station at Kintore as well as improved rail times, as well as more frequent trains, following dualling of the track between Aberdeen and Inverness. (note- the campaign is delayed due to the coronavirus outbreak)
- A long-term action plan has already been developed for this corridor however not all measures could be implemented in PORTIS due to additional funding levels required to implement as well as longer design and approval timescales which are needed for larger scale projects. This action plan will continue to be used for implementation as and when funding becomes available.
- The A96 is one of the key commuter corridors and Aberdeen will seek to widely promote the smart journey planner to businesses to encourage them to download the App.
- Funding Application made for bus & cycling priority study by ACC to Sustrans (a national active travel charity, Transport Scotland currently devolve some funding to Sustrans to manage on their behalf)

Barriers

Institutional

There were many improvement actions identified for the A96 Corridor however there was insufficient time and budget to develop larger projects (e.g. express bus corridor) which would have a larger impact on modal shift. Funding had been identified for a possible express bus service between Craibstone P&R and the city centre however following a market test this indicated it would be costly to do and exceeded the available funding.

Technological

To improve display of bus timetables and up to date information at bus shelters Currently most of the information in bus shelters (such as timetable information) is paper display and therefore cannot be updated on a real-time information basis. By installing the e-readers this is a digital display and the information can be updated remotely.

Drivers

Environmental

By shifting commuters and individuals onto multi-modal journeys and making these options more attractive will, longer-term, help improve as well as help alleviate traffic congestion. The A96 Corridor has seen significant developments - new housing developments, opening of the P&J Live (new exhibition and conference centre) - and therefore increased demand will be placed. Having the active and sustainable travel options available to 'lock-in' these travel behaviours will be vital to reducing the number of private vehicles on our transport network.

BY SHIFTING COMMUTERS AND INDIVIDUALS ONTO MULTI-MODAL JOURNEYS AND MAKING THESE OPTIONS MORE ATTRACTIVE WILL, LONGER-TERM, HELP IMPROVE AS WELL AS HELP ALLEVIATE TRAFFIC CONGESTION.

Awareness

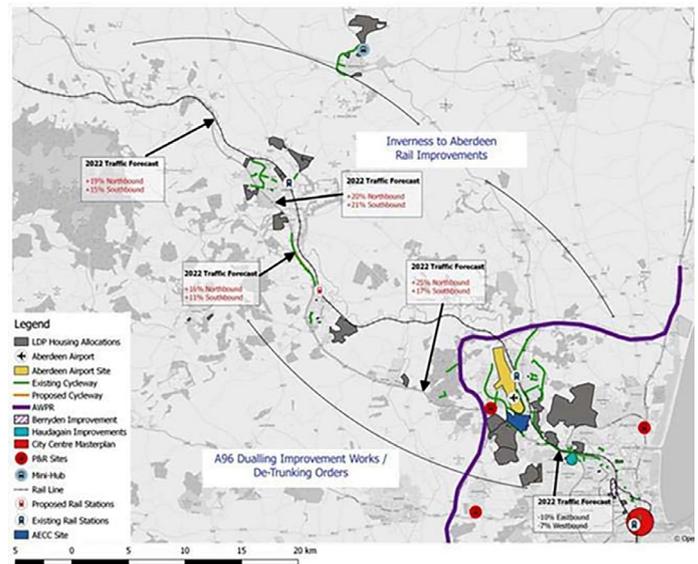
Promotion of new improvements on the corridor such as Craibstone P&R, dualling of the rail between Aberdeen and Inverness as well as the new Kintore Rail Station. This is particularly important as there are commuting towns in the Aberdeenshire area from which individuals are commuting into the city centre and we want to reduce vehicles coming into the city; thereby, making a nicer urban environment.

Regional Transformation

There have been a number of significant transformational projects on the corridor - AWPR, Kintore Rail Station, A96 dualling of rail track, opening of the event venue P&J Live, Berryden Improvement Corridor Scheme, Haudagain Junction Improvements - these projects tie into one another and are expected to ease congestion and help make active and sustainable transport more attractive.

Lessons learned

- ➔ Setting objectives and creating an action plan are important for planning - ideally within the first year, allowing time for implementation in years 2 or 3 and then reporting in year 4. Working with stakeholders to decide quick wins and actions was also helpful to undertake. Identify other funding sources and applying as early as possible, as many funders will expect spend within the same financial year.
- ➔ Determine which projects can be delivered within own team. For example, projects such as an Active Travel Hub, once investigated, required assistance and funding from multiple partners and; therefore, are more challenging and time consuming to deliver.
- ➔ Engage internal colleagues and partners who are more focussed on specific areas e.g. Neustrans regularly advertise through various media.



IS THIS SOMETHING FOR US?

Using a phased approach implementing a number of the quick wins can get the ball rolling for more ambitious, financially more demanding actions. By addressing sustainable travelling along one of the major commuter corridors, lessons learnt can be applied to other strategic transport corridors in the future.

Understanding what other funding is available is also important. Through PORTIS Aberdeen has been able to use the data and stakeholder feedback to develop action plans and business cases to be able to apply for additional funding.

Stakeholder engagement and consultation is vital to projects being a success and gaining better take-up when implemented on the ground.

CIVITAS PORTIS TRANSFERABILITY



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More info about CIVITAS PORTIS can be found on our website: <http://civitas.eu/portis>

PARTNERSHIP



Aberdeen City Council



Aberdeenshire Council



Aberdeen Harbour



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IMPRINT

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