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|-------------------------|---|--------------------|------------------------|
| <b>Report To:</b>       | <b>Environment and Regeneration Committee</b> | <b>Date:</b>       | <b>16 January 2025</b> |
| <b>Report By:</b>       | <b>Head of Physical Assets</b>                | <b>Report No:</b>  | <b>ENV004/25/SJ/EM</b> |
| <b>Contact Officer:</b> | <b>Eddie Montgomery</b>                       | <b>Contact No:</b> | <b>01475 712472</b>    |
| <b>Subject:</b>         | <b>Inverclyde Strategic Transport Model</b>   |                    |                        |

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## **1.0 PURPOSE AND SUMMARY**

1.1  For Decision  For Information/Noting

1.2 The purpose of this report is to inform Committee of a study undertaken to build a strategic traffic model for Inverclyde. The model used the Strathclyde Regional Transport Model (SRTM) to develop a more detailed model for the Inverclyde area.

## **2.0 RECOMMENDATIONS**

2.1 That the Committee:

- notes the development of the new Inverclyde Transport Model; and
- notes the forecast pressure areas highlighted based on the 5-year and 10-year traffic growth models for 2027 and 2032.

**Eddie Montgomery**  
**Head of Physical Assets**

### 3.0 BACKGROUND AND CONTEXT

#### Inverclyde Strategic Transport Model

- 3.1 In order to consider the effect of future large scale developments and potential changes to the transport network the Roads Service commissioned a consultant, Atkins Réalis to construct a strategic transport model of the Inverclyde area.
- 3.2 The Strathclyde Regional Transport Model (SRTM) was used as a basis for the development of a roads only cordoned model of the Inverclyde Council area. SRTM is a multi-modal 'tour-based' strategic transport model covering the Strathclyde area, including the eight Clydeplan Local Authorities, three Ayrshire Authorities and parts of Argyll and Bute.
- 3.3 Addition of new links and zones were introduced to the model to provide suitable detail for the council area providing more local detail.
- 3.4 The new Inverclyde model tests the following time periods at a high level i.e. it is not a minute by minute assessment:
- AM (08:00 hours - 9:00 hours);
  - Lunchtime (average hour 10:00 hours - 13:00 hours); and
  - PM (17:00 hours - 18:00 hours).
- 3.5 Calibration and validation against updated survey data was carried out to ensure the model reflects the 2022 travel conditions.

#### Future Year Assessment Findings

- 3.6 The Inverclyde model was used to test the effect of traffic growth only (i.e. no changes to the existing network or future developments) in 2027 and 2032. The findings are presented in the document entitled Inverclyde Saturn Modelling – 2027 and 2032 forecast models – November 2024 a copy of which is available in the Members Lounge. The key elements for consideration in the model are:

**Volume over Capacity or VoC (%)** – This is the volume of traffic using a junction as a proportion of the junction's capacity e.g. a junction used by 900 vehicles and with a capacity of 1,000 vehicles has a VoC of 90%. A VoC of over 85% suggests a junction would experience congestion.

**Delay (seconds)** - Delay experience by a vehicle travelling along a road (link). This is from several contributions:

- Link delay from travelling along the road (which may slow down due to being busy);
- Junction delay from congestion at a junction.

- 3.7 When looking at delays the model highlighted the following links in 2022, 2027 and 2032:

| Location                             | Peak Period | 2032 Delay | 2027 Delay | 2022 Delay |
|--------------------------------------|-------------|------------|------------|------------|
| Branchton Rd NB at A78 Inverkip Rd   | AM, LT, PM  | 127s       | 126s       | 123s       |
| Manor Cres NB at A770 Cardwell Rd    | AM, LT, PM  | 118s       | 117s       | 107s       |
| Gibshill Rd NB at A8 Port Glasgow Rd | AM          | 70s        | 70s        | 65s        |
| Cathcart St EB at A8 Rue End St      | LT, PM      | 65s        | 65s        | 64s        |
| Ratho St NB at A8 E Hamilton St      | AM          | 62s        | 62s        | 62s        |

3.8 The majority are roads that join the A8 or A78 trunk roads, with one on the A770. Although Branchton Road experiences the longest delay the increase in delay between 2022 and 2032 is only 4 seconds. Manor Crescent experiences the biggest increase in delay going from 107 seconds in 2022 to 118 seconds in 2032.

3.9 The model highlighted capacity issues at the following links in 2022, 2027 and 2032:

| Location                           | Peak Period | 2032 VoC | 2027 VoC | 2022 VoC |
|------------------------------------|-------------|----------|----------|----------|
| Manor Cres NB at A770 Cardwell Rd  | PM          | 91%      | 91%      | 88%      |
| A770 Brougham St EB at Patrick St  | AM          | 90%      | 89%      | 89%      |
| A770 Cardwell Rd EB at Manor Cres  | AM          | 89%      | 88%      | 81%      |
| Branchton Rd NB at A78 Inverkip Rd | AM, PM      | 87%      | 87%      | 85%      |

3.10 The model shows capacity issues at the following junctions in 2022, 2027 and 2032:

| Location                                      | Peak Period | 2032 VoC | 2027 VoC | 2022 VoC |
|---|-------------|----------|----------|----------|
| B7054 Baker St at B788 Ingleston St           | AM, PM      | 102%     | 101%     | 99%      |
| A78 Inverkip Rd / Gleninver Rd / Branchton Rd | AM, PM      | 95%      | 95%      | 92%      |
| A770 Cardwell Rd / Manor Cres                 | AM, PM      | 93%      | 92%      | 89%      |
| A770 Brougham St / Patrick St                 | AM          | 91%      | 91%      | 90%      |
| B788 Dellingburn St at A8 E Hamilton St       | AM, PM      | 91%      | 91%      | 90%      |

3.11 The model has highlighted various areas where issues may occur if the growth in traffic occurs as anticipated. These are on A and B class roads or side roads joining them.

## 4.0 PROPOSALS

4.1 The Committee is requested to note the development of the Inverclyde Transport Model and the forecast pressures highlighted based on the 5-year and 10-year forecast models.

4.2 Officer's view is that the best means of minimising congestion and delays on the Inverclyde Road Network is to minimise private car travel, particularly single car occupancy. This could be achieved through the continued promotion of active travel and the use of public transport. The Roads Service will continue to work on improving active travel routes to encourage more people including families with young children to walk, wheel or cycle.

## 5.0 IMPLICATIONS

5.1 The table below shows whether risks and implications apply if the recommendation(s) is(are) agreed:

| SUBJECT                                   | YES | NO |
|---|-----|----|
| Financial                                 |     | x  |
| Legal/Risk                                |     | x  |
| Human Resources                           |     | x  |
| Strategic (Partnership Plan/Council Plan) |     | x  |

|   |  |   |
|---|--|---|
| Equalities, Fairer Scotland Duty & Children/Young People's Rights & Wellbeing |  | X |
| Environmental & Sustainability  |  | X |
| Data Protection   |  | X |

## 5.2 Finance

There are currently no cost implications associated with this report, however, if the model is to be used to determine the impact of future road schemes or planning developments there would be a cost associated with the consultant time involved.

### One off Costs

| Cost Centre | Budget Heading | Budget Years | Proposed Spend this Report | Virement From | Other Comments |
|-------------|----------------|--------------|----------------------------|---------------|----------------|
| N/A         | -              | -            | -                          | -             | -              |

### Annually Recurring Costs/ (Savings)

| Cost Centre | Budget Heading | With Effect from | Annual Net Impact | Virement From (If Applicable) | Other Comments |
|-------------|----------------|------------------|-------------------|-------------------------------|----------------|
| N/A         | -              | -                | -                 | -                             | -              |

## 5.3 Legal/Risk

No implications.

## 5.4 Human Resources

No implications.

## 5.5 Strategic

The development of the model will potentially assist in assessment of the impact of future road schemes and major developments.

## 5.6 Equalities, Fairer Scotland Duty & Children/Young People

### (a) Equalities

This report has been considered under the Corporate Equalities Impact Assessment (EqIA) process with the following outcome:

|   |  |
|---|--|
|   | YES – Assessed as relevant and an EqIA is required.  |
| X | NO – This report does not introduce a new policy, function or strategy or recommend a substantive change to an existing policy, function or strategy. Therefore, assessed as not relevant and no EqIA is required. |

(b) Fairer Scotland Duty

If this report affects or proposes any major strategic decision:-

Has there been active consideration of how this report's recommendations reduce inequalities of outcome?

|   |  |
|---|--|
|   | YES – A written statement showing how this report's recommendations reduce inequalities of outcome caused by socio-economic disadvantage has been completed. |
| x | NO – Assessed as not relevant under the Fairer Scotland Duty for the following reasons: Provide reasons why the report has been assessed as not relevant.    |

(c) Children and Young People

Has a Children's Rights and Wellbeing Impact Assessment been carried out?

|   |   |
|---|---|
|   | YES – Assessed as relevant and a CRWIA is required.   |
| x | NO – Assessed as not relevant as this report does not involve a new policy, function or strategy or recommends a substantive change to an existing policy, function or strategy which will have an impact on children's rights. |

5.7 **Environmental/Sustainability**

Has a Strategic Environmental Assessment been carried out?

|   |   |
|---|---|
|   | YES – assessed as relevant and a Strategic Environmental Assessment is required.  |
| x | NO – This report does not propose or seek approval for a plan, policy, programme, strategy or document which is like to have significant environmental effects, if implemented. |

5.8 **Data Protection**

Has a Data Protection Impact Assessment been carried out?

|   |  |
|---|--|
|   | YES – This report involves data processing which may result in a high risk to the rights and freedoms of individuals.                                    |
| x | NO – Assessed as not relevant as this report does not involve data processing which may result in a high risk to the rights and freedoms of individuals. |

6.0 **CONSULTATION**

6.1 None.

## **7.0 BACKGROUND PAPERS**

7.1 None.