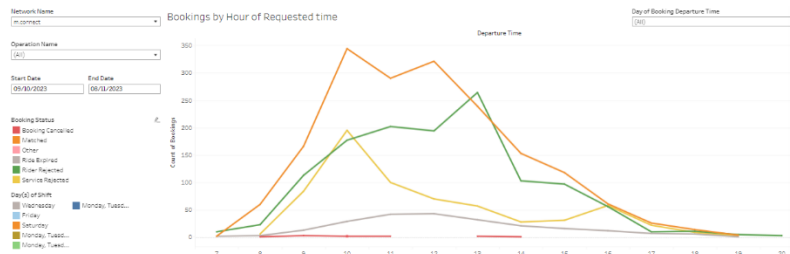


Bus Revolution - Phase 1a Weekend service option appraisal

Speyside 691 Service

Project Board to consider the m.connect analysis provided by Liftango when deciding number of vehicles to operate a Saturday service in the 5 on-demand areas in Moray (Speyside, Buckie, Keith, Egin & Forres).

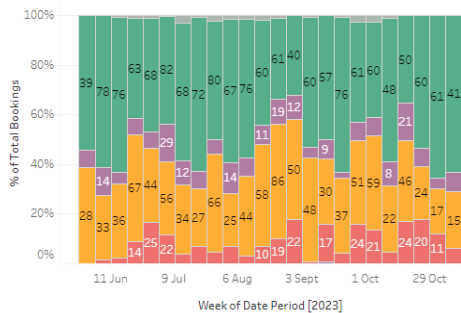
Current demand profile:



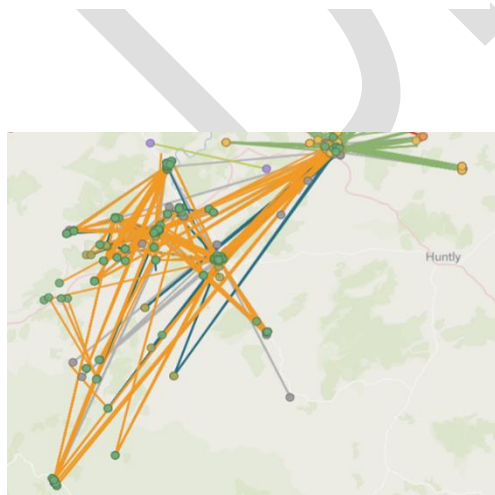
The balance of supply and demand is reflected somewhat in the trip acceptance and rejection statistics. The image above shows that the “service rejected” peak, i.e. unavailability of trips, is between 9-11am. This

implies a lack of capacity available at this time, which is further reflected by very strong utilization in the Elgin and Keith services during this period. The “rider rejected” peak is between 10am and 1pm and increases towards 1pm, as supply is being removed from the service. This implies that passengers are being offered alternative trips which do not suit their travel needs. In the late afternoon demand is lower however “service rejected” is on a 1:1 basis implying that a lack of capacity occurs again at this time.

Bookings by Status Percentage



Each zone has its own characteristics. Forres for example is relatively small and has higher convergence of trip requests than Speyside which is larger and less dense, particularly at the core of the zone. This leads to differences in trip booking success. Keith and Speyside consistently have the highest booking success rate.



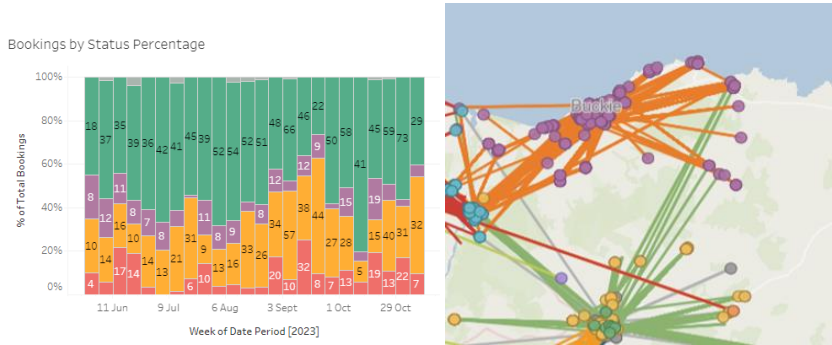
The image to the left shows the trip paths over a multi-month period. Quick visual analysis shows the difference in movement patterns of the Speyside service. In Speyside there is sufficient supply of vehicles from Mon-Fri, yet at peak times of demand (see demand profile above) the zone structure works against booking success.

Speyside has 3-4 vehicles available with plenty capacity, has low demand with a complex zone. All factors that have led to high booking success rate in general.

Current Speyside (Mon-Fri Service) monthly average passenger figures sit at 395, equating to an average of 19 passengers a day.

Buckie 694 Service

Current booking success in Buckie is the lowest in Moray alongside Elgin.

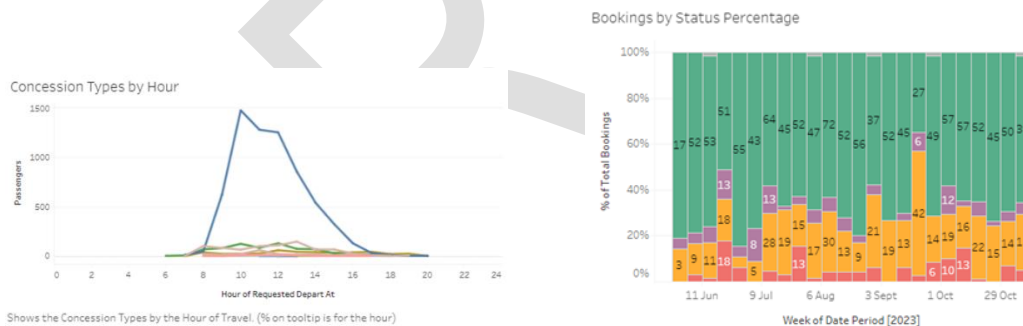


The image above right shows the trip paths over a multi-month period in Buckie and Keith. Again, the movement patterns for Mon-Fri Buckie service are spread meaning that the current 2 vehicles need to cover a broader range of movements and limit ride sharing opportunities and thus reducing booking success.

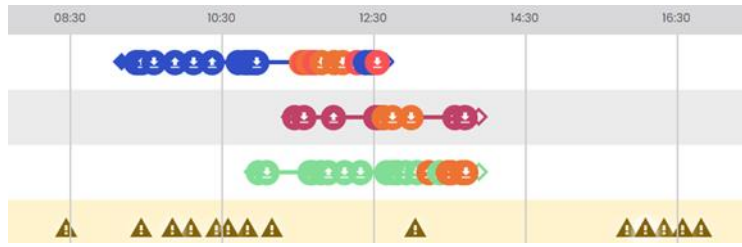
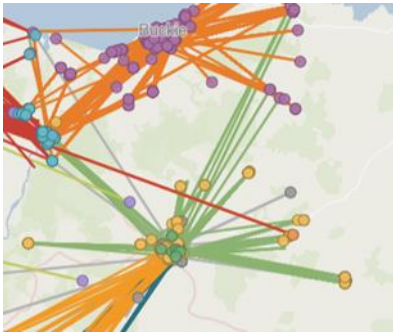
Demand profile follows the same pattern as identified for Speyside.

Current Buckie (Mon-Fri Service) monthly average passenger figures sit at 242, equating to an average of 12 passengers a day.

Keith 696 Service



Demand for the service overall is strongest in the morning across all categories and tapers through the afternoon. This may be a reflection of true demand; however, it is important to note that supply in the highest demand locations (Elgin and Keith) is heavily skewed to the morning.

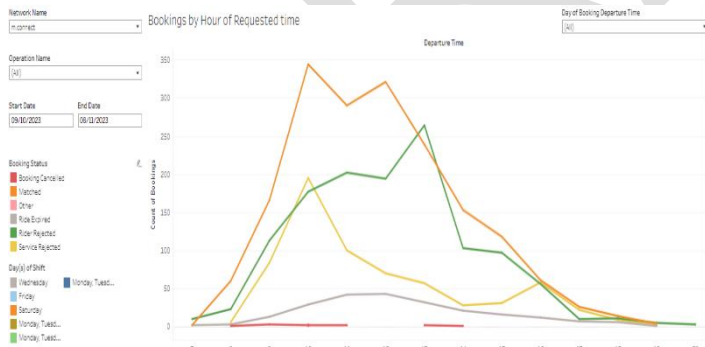


The image above left shows the trip paths over a multi-month period in Keith. This is movement patterns for Mon-Fri Keith service and has demand in Cullen, Rothiemay, Mulben and Dufftown, all of which is over and above the journeys within the Keith and Fyfe Keith. This spread shows that the current 1 vehicle set up works very hard and misses demand as shown in the image to the right (Warning Triangles within the yellow band is unallocated journeys that have been requested but can't be matched to available capacity).

Analysis of unallocated rides indicates a consistent pattern of rides being unfulfilled in Forres, Elgin and Keith regions. In each of these zones, bus availability windows are quite small, meaning that demand must be forced into the available periods. Particularly in periods with a single vehicle operating, the ability to serve these trips is much lower due to a combination of low capacity, and dissimilar ride requests (1 vehicle can't be in 2 places).

Current Keith (Mon-Fri Service) monthly average passenger figures sit at 233, equating to an average of 11 passengers a day.

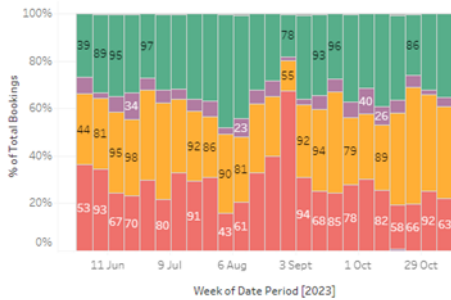
Elgin 697 Service



This balance of supply and demand is reflected somewhat in the trip acceptance and rejection statistics. The image above shows that the “service rejected” peak, i.e. unavailability of trips, is between 9-11am. This implies a lack of capacity available at this time, which is further reflected by very strong

utilisation in the Elgin and Keith services during this period. The “rider rejected” peak is between 10am and 1pm and increases towards 1pm, as supply is being removed from the service. This implies that passengers are being offered alternative trips which do not suit their travel needs. In the late afternoon demand is lower however “service rejected” is on a 1:1 basis implying that a lack of capacity occurs again at this time

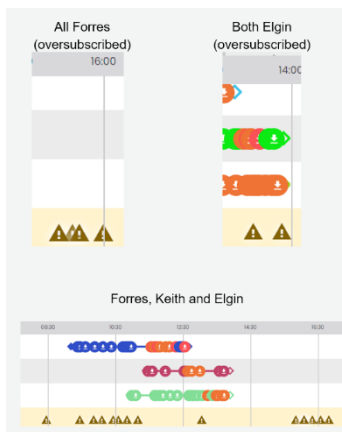
Bookings by Status Percentage



Current booking success in Elgin is the lowest In Moray alongside Buckie.

Visual analysis shows the difference in movement patterns between the Forres service and Elgin service. The Elgin service has 4 larger groupings, meaning that vehicles need to cover a broader range of movements in a larger zonal area.

The Zone set up along with the limited vehicle hour's impacts on the ability to meet current demand and reduces the booking success rate as shown in the booking status chart above.



Analysis of unallocated rides show a consistent pattern of rides being unfulfilled in Elgin. Vehicle availability windows are quite small, meaning that demand must be forced into the available periods.

Particularly in periods with a single vehicle operating, the ability to serve these trips is much lower due to a combination of low capacity, and dissimilar ride requests (1 vehicle can't be in 2 places).

Current Elgin (Mon-Fri Service) monthly average passenger figures sit at 420, equating to an average of 20 passengers a day.

m.connect Scheduled services

The board may also wish to consider introducing service routes into weekend service operation as an alternative solution or as part of a scheduled and on-demand service mix. All service costs based on Diesel vehicle use due to the current timetable commitments (does not accommodate charging time). Four service routes have been identified for consideration; these are:

Service 309 – Cullen-Buckie-Keith

The existing timetable, as shown below; can be replicated or amended to accommodate an alternative service pattern.

Service 309 Cullen - Buckie - Keith

Monday to Friday

	1	2	3	4	5	6	7	8	9	10	11
CULLEN (Square)	0515	0615	0715	0850	1015	1150	1335	1535	1715	1900	2015
Portknockie (Spar)			0720	0855	1020	1155	1340	1540	1720	1905	2020
Findochty (Seaview Road)			0725	0900	1025	1200	1345	1545	1725	1910	2025
Portessie (Old Post Office)			0729	0904	1029	1204	1349	1549	1729	1914	2029
BUCKIE (East Church Street)	0525	0625	0733	0908	1033	1208	1353	1553	1733	1918	2033
Portgordon (Post Office)			0738	0913	1038	1213	1358	1558	1738	1923	
Enzie Crossroads			0741	0916	1041	1216	1401	1601	1741	1926	
Aultmore	0541	0641	0751	0926	1051	1226	1411	1611	1751	1936	
Newmill (Mill Brae)			0756	0931	1056	1231	1416	1616	1756	1941	
KEITH (Railway Station)	0549	0649	0801	0936	1101	1236	1421	1621	1801	1946	
Train Depart for Aberdeen	0558	0653	0817	1013	1159	1345	1534	1640	1819		
Train Arrives from Aberdeen		0725	0825	0929	1118	1304	1452	1644	1829	1925	
Bus departs for Cullen	0550	0650	0817	0940	1123	1310	1500	1650	1835	1950	
A96/Church road on request											
Grange Cross roads	0559	0659	0826	0949	1132	1319	1509	1659	1844	1959	
CULLEN (Square)	0612	0712	0849	1002	1145	1332	1522	1712	1857	2012	
Hail and ride between stops											

Timetable above effective from 02 May 2023

Service will not operate on the following days: May Day bank holiday, 25 & 26 December, 01 & 02 January



Current 309 (Mon-Fri Service) monthly average passenger figures sit at 510, equating to an average of 24 passengers a day.

Service 314 – Forres Town service

One of the authority's most popular services. Existing timetable displayed below but can be amended to remove current schedule gaps for Home to School Transport (HTS).

Service 314 - Forbeshill-Forres Town Service

Monday to Thursday

	1	2	3	4	5	6	7	8	9
Forres St Leonards Church	0840	0930	1020	1110	1200	1340	1430	1630	**
Forbeshill Top End	0843	0933	1023	1113	1203	1343	1433	1633	**
Forbeshill Carisbrooke	0845	0935	1025	1116	1205	1345	1435	1635	**
Forres Tolbooth	0848	0938	1028	1118	1208	1348	1438	1638	**
Lidl Car Park	0850	0940	1030	1120	1210	1350	1440	1640	**
Nairn Road Tesco	0852	0942	1032	1122	1212	1352	1442	1642	**
Forres Medical Centre	0855	0945	1035	1125	1215	1355	1445	1645	**
Forres Dental Centre	0857	0947	1037	1127	1217	1357	1447	1647	**
Mannachie Road – Falconer Road Junction	0859	0949	1039	1129	1219	1359	1449	1649	**
Mannachie Road – Meadowlark Nursing Home	0901	0951	1041	1131	1221	1401	1451	1651	**
Mannachie Road – Allan Drive Junction	0903	0953	1043	1133	1223	1403	1453	1653	**
Lidl Car Park	0908	0958	1048	1138	1228	1408	1458	1658	**
Nairn Road Tesco	0910	1000	1050	1140	1230	1410	1500	1700	**
Forres Tolbooth	0912	1002	1052	1142	1232	1412	1502	1702	**
Forres St Leonards Church	0915	1005	1055	1145	1235	1415	1505	1705	**



Fridays Only

	1	2	3	4	5	6	7	8	9
Forres St Leonards Church	0840	0930	1020	1110	1200	**	1430	1520	1610
Forbeshill Top End	0843	0933	1023	1113	1203	**	1433	1523	1613
Forbeshill Carisbrooke	0845	0935	1025	1115	1205	**	1435	1525	1615
Forres Tolbooth	0848	0938	1028	1118	1208	**	1438	1528	1618
Lidl Car Park	0850	0940	1030	1120	1210	**	1440	1530	1620
Nairn Road Tesco	0852	0942	1032	1122	1212	**	1442	1532	1622
Forres Medical Centre	0855	0945	1035	1125	1215	**	1445	1535	1625
Forres Dental Centre	0857	0947	1037	1127	1217	**	1447	1537	1627
Mannachie Road – Falconer Road Junction	0859	0949	1039	1129	1219	**	1449	1539	1629
Mannachie Road – Meadowlark Nursing Home	0901	0951	1041	1131	1221	**	1451	1541	1631
Mannachie Road – Allan Drive Junction	0903	0953	1043	1133	1223	**	1453	1543	1633
Lidl Car Park	0908	0958	1048	1138	1228	**	1458	1548	1638
Nairn Road Tesco	0910	1000	1050	1140	1230	**	1500	1550	1640
Forres Tolbooth	0912	1002	1052	1142	1232	**	1502	1552	1642
Forres St Leonards Church	0915	1005	1055	1145	1235	**	1505	1555	1645

Timetable above effective from 02 May 2023

Service will not operate on the following days: May Day bank holiday, 25 & 26 December, 1 & 2 January.



Current 314 (Mon-Fri Service) monthly average passenger figures sit at 1122, equating to an average of 53 passengers a day.

Service 334 – Elgin-Lhanbryde-Kingston

Another popular service provided. Existing timetable would generate familiarity with existing customer base, but here is a real opportunity to review and develop the timetable to accommodate additional rotations within the operating period covered.

Service 334 Elgin - Kingston

Monday to Friday

	1	2	3	4	5	6	7
Tesco Haugh Road	****	****	****	****	****	****	****
Elgin Bus Station	****	1030	****	****	1340	1615	1800
Ashgrove Park	****	1033	****	****	1343	1618	1803
Linkwood College	****	1035	****	****	1345	1620	1805
Bain Avenue	****	1037	****	****	1347	1623	1808
Pinegrove	0704	1040	****	****	1350	1625	1810
Lhanbryde Post office	0709	1045	****	****	1354	1630	1815
Lhanbryde Templand Road	0712	1048	****	****	1356	1633	1818
Urquart Beils Brae	0716	1053	****	****	1401	1640	1825
Garmouth High Street	0727	1104	****	****	1412	1651	1834
Kingston Beach Road	0733	1108	****	****	1416	1655	1838
Kingston Beach Road	0734	1110	****	****	1417	1700	1839
Garmouth High Street	0740	1114	****	****	1421	1706	1845
Urquart Beils Brae	0750	1124	****	****	1431	1716	1855
Lhanbryde Templand Road	0757	1131	****	****	1438	1723	1902
Lhanbryde Post office	0802	1136	****	****	1444	1727	1906
Pinegrove	0807	1141	****	****	1449	1733	****
Bain Avenue	0809	1143	****	****	1452	1735	****
Linkwood College	0812	1146	****	****	1455	1738	****
Ashgrove Park	0814	1148	****	****	1457	1740	****
Elgin Bus Station	0817	1151	****	****	1500	1743	1910
Tesco Haugh Road	0821a	1155a	****	****	1504a	1747a	1914a

Code:

a – Continues to Tesco Haugh road, on request.

Timetable above effective from 02 May 2023

Service will not operate on the following days: May Day bank holiday, 25 & 26 December, 1 & 2 January.



Current 344 (Mon-Fri Service) monthly average passenger figures sit at 1130, equating to an average of 54 passengers a day.

Service 366 – Aberlour-Knockando-Elgin

Added to consider the U22 working and leisure market from Speyside. The 5 days service has yet to yield stronger patronage since the service uplift, however, a weekend service may well improve this. The current timetable may require a review and include additional evening journeys.

Service 366 Aberlour - Elgin via Marypark, Knockando and Archiestown

Monday - Thursday					Friday						
	1	2	3	4	5		1	2	3	4	5
Aberlour Square	****	0900	1140	1640	1920	Aberlour Square	****	0900	1140	1700	1940
Carron Road End	****	0903	1143	1643	1923	Carron Road End	****	0903	1143	1703	****
Glenfarclas Dist Road End	****	0906	1146	1646	1926	Glenfarclas Dist Road End	****	0906	1146	1706	****
Marypark	****	0910	1150	1650	1930	Marypark	****	0910	1150	1710	****
Knockando	****	0920	1200	1700	1940	Knockando	****	0920	1200	1720	****
Carron	****	0931	1211	1711	1951	Carron	****	0931	1211	1731	****
Archiestown	****	0936	1216	1716	1956	Archiestown	****	0936	1216	1736	****
Macallan Distillery	****	0943	1223	1723	2003	Macallan Distillery	****	0943	1223	1743	****
Rothies	****	0948	1228	1728	2008	Rothies	****	0948	1228	1748	1950
Fogwatt	****	0956	1236	1736	2016	Fogwatt	****	0956	1236	1756	1958
Edgar Road	****	1002	1242	1742	2022	Edgar Road	****	1002	1242	1802	2004
Elgin Railway Station	****	1006	1246	1746	2026	Elgin Railway Station	****	1006	1246	1806	2008
Dr Grays Roundabout	****	1010	1250	1750	2030	Dr Grays Roundabout	****	1010	1250	1810	2012
Elgin Bus Station	****	1015	1255	1755	2035	Elgin Bus Station	****	1015	1255	1815	2017

Timetable above effective from 02 May 2023

Service will not operate on May Day bank holiday, 25-26 December, 01 - 02 January.



Service 366 Elgin - Aberlour via Archiestown, Knockando and Marypark

Monday - Thursday					Friday						
	1	2	3	4	5		1	2	3	4	5
Elgin Bus Station	****	1020	1300	1800	****	Elgin Bus Station	****	1020	1540	1820	****
Dr Grays Roundabout	****	1025	1305	1805	****	Dr Grays Roundabout	****	1025	1545	1825	****
Elgin Railway Station	****	1029	1309	1809	****	Elgin Railway Station	****	1029	1549	1829	****
Edgar Road	****	1033	1313	1813	****	Edgar Road	****	1033	1553	1833	****
Fogwatt	****	1039	1319	1819	****	Fogwatt	****	1039	1559	1839	****
Rothies	****	1047	1327	1827	****	Rothies	****	1047	1607	1847	****
Macallan Distillery	****	1052	1332	1832	****	Macallan Distillery	****	1052	1612	1852	****
Archiestown	****	1059	1339	1839	****	Archiestown	****	1059	1619	1859	****
Carron	****	1104	1344	1844	****	Carron	****	1104	1624	1904	****
Knockando	****	1115	1355	1855	****	Knockando	****	1115	1635	1915	****
Marypark	****	1125	1405	1905	****	Marypark	****	1125	1645	1925	****
Glenfarclas Dist Road End	****	1129	1409	1909	****	Glenfarclas Dist Road End	****	1129	1649	1929	****
Carron Road End	****	1132	1412	1912	****	Carron Road End	****	1132	1653	1932	****
Aberlour Square	****	1135	1415	1915	****	Aberlour Square	****	1135	1655	1935	****

Timetable above effective from 02 May 2023

Service will not operate on May Day bank holiday, 25-26 December, 01 - 02 January.



Current 366 (Mon-Fri Service) monthly average passenger figures sit at 211, equating to an average of 10 passengers a day.