



Purpose: For Decision

# Committee report

Committee	<b>Solent Transport Joint Committee</b>
Date	<b>5 October 2020</b>
Title	<b>Solent Local Rail Connectivity Study</b>
Report of / to	Colin Rowland / Solent Transport Joint Committee

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## EXECUTIVE SUMMARY

1. The Solent Rail Connectivity Study, which has been jointly prepared by Solent Transport and Network Rail over the last year as a key item in Solent Transport's business plan, sets out a clear strategic case and recommendations for improvements that would contribute towards creation of a 'metro style' service which would significantly enhance rail's role as a part of the transport network serving local journeys within and across the Solent area.
2. This would support many of the Member authorities' wider priorities, cutting across themes including sustainable development and economic growth; and access to services improving our local environment; and supporting creation of a fairer society. Inputs were invited and were provided by the Member Authorities and were consistent with the authorities' Local Transport Plan priorities
3. It therefore answers desires- shared with many other stakeholders across Solent- for creation of a Solent local rail strategy that is realistic and achievable. This study and the emerging strategic advice within is shared with Network Rail- the national rail infrastructure owner/manager, an organisation with significant capacity and ability to progress and implement the study's recommendations.
4. Solent Transport Joint Committee are therefore recommended to endorse the content of this Study.
5. Further studies looking at improving rail connectivity between Solent and more distant areas, including London, will combine to form a wider strategy as they become available.

## BACKGROUND

6. A priority for Solent Transport's business plan has been the development of a new Solent Rail strategy. We recognise the strong desire amongst local stakeholders to improve the rail network in Solent to address a range of transport, growth and environmental challenges (following earlier studies such as Solent LEP's "Solent Metro" studies in 2016). A particular desire is for improved Portsmouth-Southampton connectivity. The strategy is also needed because existing adopted rail strategies make relatively few proposals for improving intra- Solent journeys.
7. Solent Transport have jointly worked with Network Rail, the government owned company which manages, maintains and develops the rail network, to prepare the Solent Connectivity Study in 2019-20. This study is a central component of planned wider transport strategy for the Solent, and sets out high level options for funders (including central Government and local funders) comprising infrastructure and service changes which would increase rail's mode share for intra-Solent journeys, contributing to efforts to address Solent-wide transport issues including congestion, car dependency, economic development and air quality.
8. This study is intended to be jointly adopted by Network Rail and the Solent Transport authorities as a core part of rail strategy for the area. Other elements are to follow via future studies set out in Para 42. The study alongside mainline studies will be a foundation from which to develop the next stage of business cases for interventions.
9. The Solent Rail Connectivity Study has been prepared as part of Network Rail's Continuous Modular Strategic Planning (CMSP) programme, which examines rail's contribution to transport needs of smaller geographical areas working with stakeholders including Local Authorities, Local Enterprise Partnerships and Passenger/ User Groups. For more information on engagement and consultation, please see Paras 45 to 47.
10. The study defined six strategic questions covering rail's scope to contribute more to sustainable development, economy and environment as well as some more technical subjects:
  1. What does the rail freight industry require of the Solent area?
  2. What are the key local travel markets that the rail network in the Solent area serves, or needs to serve in future?
  3. What level of rail service is required to support sustainable growth and development in the large urban areas of the Solent and make a larger contribution to local efforts to enhance the public transport offer and secure mode shift away from the private car?
  4. What City to City journey time and frequency is required to be competitive with road travel between the two cities the peak and off peak?
  5. What inhibits demand at the lowest usage stations in the Solent area, and what could increase usage?
  6. What is the extent of poor resilience in the Solent area and how can this be addressed?

11. A significant evidence base was developed to answer these questions in the most deliverable and strategically optimal way. Recommendations are given for both enhanced train services, and infrastructure improvements required to enable them.
12. The study identifies that rail has considerable potential to better serve “medium distance” journeys within and between the wider Portsmouth and Southampton city regions and nearby towns (eg Fareham, Totton, Eastleigh, Havant) to the city centres; and also to employment hubs in edge-of-urban locations(eg Swanwick/Whiteley, Hilsea, Cosham).
13. Rail also has strong scope to serve a greater number of journeys between outer parts of one city region, and key hubs in the other- example journeys for these flows include Cosham to Southampton, or Bursledon to Portsmouth.
14. Many of these are travel flows which have grown in importance in recent decades with changing locations of new development and population growth resulting from construction of the M27.
15. They are also travel markets where rail is already has some ingredients for success:
  - Whilst travel to/from London is the most important rail passenger flow to/from Solent (and is critical for operator revenues), demand from the Solent area to/from Southampton, Portsmouth and Winchester combined is more than double that to London, demonstrating rail already has a strong share in the intra-Solent travel market to build from.
  - Analysis found that in the AM peak hour, the physical speed/ journey time of existing train services is quicker than driving for about two thirds of all possible station-to - station journeys within Solent.
16. However, this potential is currently severely undermined by the low frequency of train services at many stations. About half of the stations in Solent are served by only a basic once-hourly service. This includes numerous stations in urban/ city locations with substantial populations and/or key destinations nearby.
17. Comparisons between Solent and other city region’s rail networks clearly show that higher network-wide average train frequencies translate into higher mode shares for rail. An aspirational target of 4 trains per hour average at stations across the network was agreed with Network Rail, achievement of which would be expected to approximately double rail usage compared to the present- making a tangible difference to many traffic and transport issues.
18. Therefore, a central recommendation of the study is that improving train frequency, rather than physical speed, should be the focus for development and enhancement efforts in future.
19. Achieving significant speed/ journey improvements on existing routes would be extremely difficult to achieve, requiring elimination of further station stops on an already comparatively under-served network (to the detriment of many existing users), creating substantial timetabling difficulties, and delivering significantly fewer benefits than steps aimed at providing higher train frequency. The alternative -

construction of large sections of entirely new line- is assessed as being economically unfeasible at this time.

20. In comparison a more frequency-focused strategy, with a particular focus on operating more “semi fast” trains (per this study’s strategic advice) whilst still requiring additional infrastructure is more operationally feasible to achieve as well as being forecast to offer greater benefits.
21. Following a process of high-level evaluation of a “long list” of 27 train service options was reduced to a shortlist of five promising options for progression to timetable and economic evaluation.
22. This evaluation found that an additional 2 trains per hour between Portsmouth, Southampton and Totton (via Swanwick - with either stopping or “skip stop” calling patterns) performed best against a wide range of criteria. “Skip stop” service patterns would be more operationally feasible.
23. This enhancement would raise network-wide train frequency to 3.4 to 3.8 trains per hour: a 32% to 49% increase compared to present, and a level of service that approaches the 4tph target level.
24. Operation of an additional one fast train and one stopping train per hour Portsmouth-Winchester also performed well against most criteria in the evaluation.

#### **CITY TO CITY CONNECTIVITY**

25. The service improvements described above would double the number of trains between Portsmouth and Southampton, substantially improving connectivity by providing more opportunities to travel each hour and reducing overall journey times by cutting the amount of time passengers would need to wait for trains.
26. Shorter waiting times would reduce generalised journey time (travel time plus wait time) between the cities by up to 15 minutes or by 20%. This would significantly improve city-to-city connectivity and deliver very significant improvements for the larger intra-Solent travel markets.
27. These proposals would improve rail’s competitiveness with city-to-city car journeys in the peak commuting periods, particularly in the Portsmouth to Southampton direction. However, a challenge remains to match road journey times in the off peak.
28. Improving access to stations and improving the station user experience is also important, particularly where matching road journey times remains a challenge. Therefore, this study sets out some potential priorities for station access improvements.
29. They would also improve connectivity to Southampton Airport through improving the range of connections to eastbound services available at Southampton Central and/or Eastleigh.
30. However, it should be noted that the City to City travel market is small compared to other travel flows in Solent. The wider Solent area beyond the cities is a key growth

area for employment and housing and development and will be key in influencing future demand and journey patterns. Service options identified through this study would service these growing travel markets.

31. Improvements as identified in this study would grow the overall size of the city-to-city rail market (from its current low base), and in time would create a stronger platform from which to develop proposals for larger-scale “transformational” interventions, which are desired by some stakeholders.

#### **DEMAND-LED NEED**

32. The study also identifies a demand-led need to improve local rail services within the Solent area. Currently committed development in Solent (and the forecast population and economic growth driving it) is forecast to result in capacity of current peak-time train services being exceeded from the early 2030s onwards.

#### **LOW-USAGE STATIONS**

33. Analysis of possible reasons for low passenger numbers at the lowest usage stations did not identify any links between usage and factors other than train frequency. This supports the case to for higher frequencies at these stations -many of which are near development sites.

#### **INFRASTRUCTURE INTERVENTIONS**

34. The network in the Solent area has limited capability to accommodate significant extra services without additional infrastructure.
35. To accommodate the recommended service improvement options, some or all of the following infrastructure measures would be required:
  - Conversion of the bay platform 2 at Fareham into a through platform, allowing trains to overtake, improving timetabling flexibility and resilience;
  - Works (electrification of a reversing siding and level crossing closure) to allow trains to terminate at Totton instead of terminating at and blocking a through platform at Southampton Central - releasing capacity here whilst also providing enhanced connectivity for Totton. This measure could also benefit Waterside rail, if current study work demonstrates a viable business case for passenger rail services to Marchwood/ Hythe
  - Additional capacity to terminate more trains at Portsmouth, through reopening the disused Platform 2 at Portsmouth Harbour station and/or providing an additional platform at Portsmouth & Southsea
  - Double tracking of the Botley Line to increase capacity and improve timetabling flexibility; and
  - Improved train routing and access to Platform 1 at Eastleigh, to reduce demand /release capacity at the more heavily used Platforms 2 & 3 (supporting timetabling flexibility)
36. The measures listed above would also support improvements to freight train operation and timetable resilience and reliability, thus helping to address some of the other strategic questions for the study.

37. The study recommends that all these schemes be entered into the Rail Network Enhancements Pipeline (RNEP) process for development towards delivery, with Fareham through platform currently the highest priority for development. Timescales for scheme development cannot currently be explicitly set out, but the study looks forward to the 2030s and 2040s, reflecting that it can often take a decade or more to progress proposed rail schemes through to delivery.
38. The study was undertaken pre-Covid-19. Long term changes to travel patterns and choices resulting from Covid-19 or the aftermath of the pandemic may play out as a factor in the timescales of rail investment. Clearly this issue is yet to fully understood.
39. However as per paras 63 to 67, many of the factors creating a case for improved rail connectivity - and securing mode shift from car to rail for certain journeys - are unlikely to diminish in long-term importance as a result of Covid-19. Therefore, it is likely that across the multi-decade timescale considered by this study, the recommendations within this study will remain relevant, however the timescales over which they are required, or can be delivered, may change.
40. Members are advised that development and delivery of these improvements will be aided if local support for these schemes, including financial contributions from local sources, eg developer contributions, can be secured. High level cost estimates have been generated for each scheme but the high uncertainty around these requires further scheme development to resolve- it would be counterproductive to publish these cost estimates at present.
41. The study will also be recommended to TFSE for further development in partnership with Network Rail and Solent Transport, and inclusion/prioritisation in their forthcoming "outer orbital" study.

## **NEXT STEPS**

42. Next steps involve securing wider endorsement of the study and undertaking additional work which builds upon the CMSP study and strengthens the case for delivery, together with supporting Network Rail and building support for development and implementation of the recommended schemes. This includes:
- Recommending endorsement of the study by Partnership for South Hampshire, our sister Joint Committee of Local Planning Authorities
  - Once we have more certainty about the post- Covid "new normal", undertaking modelling of the proposals utilising the SRTM model to identify which communities and parts of the highway network would most benefit. This will support conversations regarding potential local funding contributions.
  - Continued joint working with Network Rail to progress business case and scheme development for the identified enhancement schemes, and also working with TFSE to promote these schemes as part of the outer orbital study.
  - To continue to work jointly with Network Rail on related forthcoming rail studies, specifically the Wessex Mainline CMSP study and the A34/ Southampton Port freight access study.

- Undertaking a “next steps” study examining new station proposals in the Solent area and whether or not these could be feasible under the future service patterns identified in the study.
  - To combine all the above actions into a rail-focused chapter as part of the planned Solent Transport Strategy, development of which is in the Partnership’s current work programme.
43. Also relevant to the next steps is the progress of local route re-opening schemes being investigated as part of the Government’s “Restoring your Railway” (RYR) fund. The Waterwise line (Totton-Hythe-Fawley) has been shortlisted for further investigation for potential restoration of passenger services (additional to current freight usage of the line). The Solent CMSP and some of the measures identified (particularly those in the Totton area) was developed with cognizance of and in liaison with those involved in development of the Waterside proposals.
44. It is also noted that although outside the scope of the Solent Rail Connectivity study, that IoW Council was also successful in securing RYR funding to investigate the possibility of reinstating the lines from Shanklin to Ventnor, and from Wootton (on the heritage Steam Railway) to Newport.

## STRATEGIC CONTEXT

45. The measures proposed within the Solent Rail Connectivity Study would support many aspects of Solent Transport’s Member LTAs strategies and policies, including the adopted Local Transport Plan 4s (LTP4s) for Portsmouth and Southampton, and the emerging LTP4s for Isle of Wight and Hampshire.
46. The measures proposed would also support various plans and strategies of Local Authorities and other bodies in the Solent area, including clean air and other environmental strategies and plans; economic development strategies and planning /development strategies.

## CONSULTATION

47. Key stakeholders across Solent and the wider area with an interest have participated in/ been offered the opportunity to engage at various stages of the study, which has been jointly led by Network Rail and Solent Transport. This includes:
- Solent Transport’s Member authorities;
  - District/Borough Councils;
  - Solent LEP;
  - local Community Rail Partnerships;
  - Transport for the South East; and
  - rail industry partners including Train and Freight Operating Companies and the Department for Transport
48. This included participation in specification of methodology and desired outputs; review of technical outputs; and review of the draft final strategy.

49. As this is a high level strategy dealing with a technical subject matter, consultation with the public was not undertaken.

### FINANCIAL / BUDGET IMPLICATIONS

50. Undertaking the SRTM modelling work set out in “next steps” is anticipated to result in a revenue cost of around £20,000 in the 2020/21 financial year, for which an allowance exists in Solent Transport’s studies budget for this year.
51. However the Covid-19 pandemic may affect the timeline for this work, as the model does not presently include any impacts of the pandemic on travel patterns, which are currently unknown. These will need to be reviewed and the model amended as necessary.
52. No other expenditure / resource implications exist at this time except for allocation of staff time to support the Next Steps actions. Network Rail are understood to be allocating financial resource to progress the next stage of development of the six

### LEGAL IMPLICATIONS

#### Statutory power to undertake proposals in the report:

53. S. 1 Localism Act 2011 (the general power of competence) permits Local Authorities to work in partnership with other public and private bodies to secure the delivery of functions, services and facilities that are for the benefit or improvement of the areas they serve.
54. S101 & S102 Local Government Act 1972 grant statutory power for Local Authorities to arrange for the discharge of their functions by a committee, sub-committee or an officer of the authority, by a Joint Committee, or by any other local authority (subject to any express provision within LGA 1972 or any subsequent Act).
55. Network Rail, as infrastructure owner/ operator, is the organisation which has responsibility for further development of proposals within this study. However options exist for Local Authorities to take on a “promoter” role, or to “co-promote” with Network Rail.

### PROPERTY IMPLICATIONS

The option to provide an additional terminal platform at Portsmouth & Southsea station could require the acquisition of land that is not currently in railway ownership. This will be considered by Portsmouth City Council, working with Network Rail and the landowners.

56. There are no other property implications as this report does not concern decisions relating to property held by any of the four Solent Transport Member Authorities.

### OPTIONS

57. There are essentially two options for Members, which are to endorse the study and its recommendations, or to not endorse the study.
58. The endorsement of the Solent Rail Connectivity Study as a core part of our (and Member Authorities') rail strategies going forwards will support medium and long term transport and development policies & strategies for all four of our Member authorities.
59. In the preparation of this study, the Solent Rail Connectivity Study working group created an extensive evidence base and evaluated a wide range of different options for overarching strategic approaches and specific interventions which could be included in the study. This included assessment of 27 different service pattern interventions, later refined to a shortlist of five, from which two have been identified in the strategic advice as having the strongest case.
60. The strategic advice presented in the final study represents the service and infrastructure improvements assessed as performing best against a range of relevant strategic, economic and operational criteria, whilst also being realistically deliverable and likely to achieve the desired outcomes. Other key factors such as likely scale of funding available and issues such as land availability were also factored into the development of these recommendations
61. If the study is not endorsed, this would mean that there would remain no LTA-supported plan for development of the rail offer in Solent.

## RISK MANAGEMENT

62. Whilst endorsement of this study does not create any immediate risks to the Member authorities or to Solent Transport, it does result in the study being afforded some "Planning status".
63. This means that future transport plans, policies and strategies; and development plans (such as Local Plans and potentially future planning applications), may refer to and in some cases rely on recommendations of the study being brought forward. If bringing forward some or all recommendations of this study later proves not to be feasible this could impose a level of risk (on various parties).
64. Risks associated with not endorsing the strategy – and the lack of a shared plan for rail investment- mean that desired rail investment and improvement in the area would be less likely to occur, and achievement of outcomes from this (environmental, economic, social) sought by Local Authorities and other stakeholders would be hindered.

## **Covid-19 impacts**

65. In the immediate short term, the impacts of measures aimed at controlling/ reducing spread of the Covid-19 virus has resulted in a large reduction in public transport demand, including rail, particularly for commuting to town/city centres.
66. However, the Solent Connectivity study and the strategic advice within cover long term timescales looking forward by a decade, two decades or more. It is expected

that society will have overcome or adapted to Covid-19 over these timescales, although some changes- for example increased home working- may not be fully reversed.

67. The key issues needing to be addressed over the long term are likely to be unchanged- ie responses to population growth & new development; reducing car dependency; carbon emissions & air quality; and promoting sustainable economic growth are likely to remain central to policy and investment choices. The difficult transport geography of parts of the Solent area will also not change.

68. Also, in recent years an increasing proportion of the younger population has no access to a car / driving licence, resulting in a higher dependency on/ utilisation of public transport. If this trend continues into this cohort's later life, this would continue to generate need for/ demand for public transport.

69. Therefore in the longer term there is still likely to be a key role for rail as a part of a sustainable 21st century transport mix, and against this background the case for improved rail connectivity in Solent is likely to still exist, and many of the interventions required to achieve it are likely to remain unchanged.

## RECOMMENDATIONS

- 1) That the Joint Committee endorse the Solent Local Rail Connectivity Study, and the emerging strategic advice within, as a major component of the Solent Transport's developing long-term strategy for the area. This includes infrastructure improvements at the following locations to enable train frequency uplifts, which will enable up to a 20% improvement in overall journey times through improvements at:
  - Fareham station
  - Totton area
  - Portsmouth City Centre
  - Between Eastleigh, Botley and Fareham
  - Eastleigh area
- 2) That the Member Authorities represented on the Joint Committee consider and take steps to endorse the study within their authorities.
- 3) That the Joint Committee approve the next steps identified in Para 42, including recommending the Study be endorsed by other Authorities and decision making bodies in Solent, and delegate responsibility for next steps to the Solent Transport Manager
- 4) That Solent Transport's work programme going forward includes working with Network Rail and other partners on the Wessex Mainline CMSP and Southampton/A34 Freight Corridor studies (to consider connectivity to London and freight access to the ports) as other key components of rail strategy / wider transport strategy for the area.

APPENDICES ATTACHED

70. Solent Connectivity CMSP Study, May 2020

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