



# **WEST CORK RAIL REPORT**

**Benefits, challenges, and solutions for bringing rail back to West Cork**

**CORK COMMUTER COALITION**

**JANUARY 2022**

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## SECTION ONE : INTRODUCTION

### A. Introduction

Since the rapid decimation of the railways in West Cork, there has been a serious lack of reliable public transport in the region, hampering growth and impacting residents for decades. There has been serious missed opportunity for the growth of rail-based tourism and rail freight, as well as the easy of movement of people throughout the county. The All Island Rail Review promises to be a once-in-a-generation opportunity to bring railways back across the island. This will be something that West Cork can, and should, benefit from.

However, there remains a significant question of exactly what should happen. Since the final passenger train completed West Cork's last journey in 1963, there have been no studies into reviving these links, no analysis of reopening rail segments, and no attempts whatsoever to rectify one of Ireland's biggest transport mistakes. As such, in this report, we aim to further understanding of what rail in West Cork could look like, and the challenges, opportunities, and difficulties that lie ahead - as well as tackle a lack of research into examining rail in this region.

As such, this is not a document analyzing the pros and cons of bringing rail back to West Cork - given the ongoing climate crisis, increasing spatial inequality, and social exclusion, the benefits of railways for fixing these problems have made themselves clear time and time again. To continue to ask the question of '*should West Cork have rail?*' is reductive - a far better question, and the question that we are asking, is '*how can rail be brought to West Cork in the most efficient, effective, and beneficial matter?*' It is also not a hard-and-fast proposal, but instead presents a variety of options, and examines a variety of different scenarios for the return of rail to the region.

There seems to be a fact that for many, there has been a quiet acceptance that the rail network is near stagnant, and destined to not grow nor expand since it settled into its general form in the late 1960s. This is something that decades of low expectations have cemented - Ireland has delivered only a single new train station since 2013, and any expansions this century have been small scale at best. Almost all current rail plans relate to existing infrastructure, with decades of urban railway proposals failing to come to fruition - at a time when our European neighbors are expanding networks, increasing access, and committing to sustainable modes of mass transport.

Recent elements of the National Development Plan foresee reopening of rail lines in the Limerick region, a move that provides hope for further expansion of the network, as well as a blueprint for what can be not just a local, but a regional and national rail revival. The All Island Strategic Rail Review is a 'once-in-a-generation' opportunity to make Cork a far more connected county, and restore rail connectivity to some of the areas that need it most. It is critical this opportunity is not wasted.

## **B. Remit of this examination**

In this examination, we are taking a broad definition of what constitutes 'West Cork'. This is all of County Cork below the Mallow-Rathmore section of the rail line, and west of the Mallow-Cork-Midleton stretch of the railway (i.e, west of Cork Harbour). This is to ensure that all possible connection options can be considered for the connection of major West Cork towns. Though not our focus, we will also be examining areas of Cork City through which any potential rail alignments would travel through at any point as a consequence of connecting any new rail corridors to the national rail network.

## **C. Aim of this examination**

- To provide analysis on a variety of options for the return of rail to West Cork.
- Address a lack of public and political discussion about the return of railways to West Cork.
- To provide insight on the major areas in West Cork which require and would benefit from rail connection.
- To outline challenges to the delivery of rail in West Cork, as well as offer potential solutions.
- To evaluate the success of the reviving former routes in comparison to the creation of newer routes.
- To evaluate which options of construction, planning, and delivery may produce the optimum outcome for rail in West Cork.
- To examine physical geographic and urban geographic factors which may pose difficulties in the return of rail to West Cork.
- Present a solid case to both the public and to the Department of Transport that reopening railways in West Cork is feasible, and that any issues which arise have surmountable solutions and approaches.
- The goal of this is not to provide a detailed proposal on what rail in West Cork should look like, as has been the case with our other related proposals. Instead, to offer recommendations to be considered during the course of the All Island Rail Review.

Note 1 : While it is regrettable, we were not able to engage in the demographic analysis using data from the 2016 Census that we wished to, or to make greater or more accurate use of population figures, owing to a number of errors with the Central Statistics Office website, which is unable to display any forms of data. Should this data become available again, or if there is data from the upcoming 2022 Census available, we endeavor to update this analysis with relevant information using this data.

## SECTION TWO : AREAS EXAMINED

There are many key factors that need to be examined when judging where new rail corridors should go, and why. Below is an individual analysis of the primary factors which display how rail can support the industry, travel, and the economy of West Cork.

### A. Areas Examined : Major Settlements

One of the key goals of improved rail links is to connect areas of significant population with major regional hubs. Railways which connect areas with significant population correspondingly see higher use, and higher success in objectives such as decarbonization and regional connectivity. This is generally considered to be the most important factor in route delineation, as it generates routine, regular use. In this case, this will likely take the form of providing direct rail connection with various towns in West Cork to Cork City. For this analysis, we selected 2,500 as the criteria for major population centers, as this relatively high number creates a clear distinction between high-populated and lower-populated settlements in West Cork, as well as denoting a workable number of settlements to make up the basis of rail expansion, as will be seen in Section 5A.

There are two caveats with the population criteria.

1. The numbers selected are for the town proper, and do not take into account the hinterland of the town, which may contain several hundred more people in the immediate vicinity, or even in the thousands in the electoral area as a whole. The 'capture area', encompassing multiple electoral areas, for a station may range even higher than this. As mentioned in note 1, there is difficulty in finding the exact population data from the Central Statistics Office.
2. The population data comes from 2016. While, ideally, we would be using up-to-date data, as opposed to data from five years ago, the unfortunate delaying of the 2021 Census to 2022 means that there is no more recent reliable data to use. While we briefly considered extrapolating existing trends, this would simply be guesswork, due to altered population patterns from the Covid-19 pandemic, such as population rise in 'Zoom Towns' throughout Ireland, as well as population declines in others because of expedited emigration or resident death due to the Covid-19 pandemic.

There are nine settlements which are considered major according to this criteria. We have also included Ringaskiddy, as a major center of employment. Though its population is approximately 700, there are over 3,500 employees at the Port of Cork facility in Ringaskiddy. (see ; Port Facilities)

#### Major Settlements

- Macroom
- Skibbereen
- Bantry

- Kinsale
- Ringaskiddy
- Carrigaline
- Clonakilty
- Passage West
- Crosshaven
- Bandon

**Key goal : Major Settlements**

Provide connectivity for all major settlements to Cork City and to other settlements in the vicinity, forming the basis of the system.

**B. Areas Examined : Minor Settlements**

While the main focus of providing rail to West Cork is the connection of major towns, it is to be noted that minor towns also contain large numbers of people who wish for improved connectivity, better commuting and travel options, and growth for their town or village. Many of these settlements contain only several hundred people, though potential stations here would likely serve the greater hinterland of the town or village, providing entry-points to transport usage for more than just the town or village which it will serve. Several of these towns can be ‘gateways’ to specific subregions of West Cork. According to our definition of ‘minor settlement’, we have taken all towns with a population of between 300 and 2,500 people.

While of course the goal is to connect as many of these as possible, it cannot be expected that major diversions to routes, or the additions of service-dividing spurs, can be provided at all times to provide service to settlements of a few hundred people. This is, unfortunately, one of the realities of the limited provision of infrastructure.



**Key goal : Minor settlements**

Connect as many minor settlements as possible by tweaking rail capture zones wherever possible to provide connectivity to these minor settlements, without seriously impacting the overall effectiveness and impact of the route.

**C. Areas Examined : Airport and Port Facilities****Cork Airport**

There is only one airport on the island of Ireland with any form of rail connection (Kerry Farranfore), and none with a direct rail connection. This is a significant anomaly by European standards. There are currently no plans to provide Cork Airport with rail service. While Cork Airport is in Cork City as a result of the boundary change in 2019, the connection of rail service with the city and county also warrants the provision of rail service to this facility.

The southern boundary was ostensibly changed to include the airport in the city, despite its geographic separation from the rest of the city. There are no plans to connect to Cork Airport to either the city or the county with any form of rapid transit within the lifetime of the Cork Metropolitan Area Transport Strategy. The benefits of this are evident - a rail connection will provide Cork Airport connectivity with both Cork City and County. Cork Airport, Ireland's second most important international airport, has recently completed a €10 million refurbishment of its runway, and sees passenger numbers of 2.5 million a year.<sup>1</sup>

Cork Airport and the railways have not co-existed, with Cork Airport opening in 1961 - the same year that the final elements of the Cork, Bandon, & South Coast Railway was removed. Naturally, if there are railway corridors connecting to the national network by running through the south of city, it makes sense to connect the airport insofar as possible. As will be mentioned in Section 2D, the potential to tie a rail connected airport to tourist efforts is immense. The logic of this connection, and other benefits of connecting through the city will also be explored in section 3C.

**Port of Cork**

The Port of Cork is the major port facility for both Cork and the south of Ireland. County Cork is home to the Port of Cork facility at Ringaskiddy, one of Ireland's major coastal ports, and one that has increased in relevance and usage post-Brexit. Initially, this site was rejected by —An Bórd Pleanála— because of the lack of rail service to this area.<sup>2</sup> As such, the All Island Strategic Rail Review presents an opportunity to rectify this absence. It is also a major employer within Ringaskiddy and the Cork Metropolitan Region, employing hundreds of employees directly, while also acting as a significant growth pole for Ringaskiddy. As will be discussed in Section 2E, the potential for major investment in Ireland's freight strategy will be unlocked with the

<sup>1</sup> <https://www.corkairport.com/news/detail/2021/01/11/cork-airport-experiences-a-decline-of-2-million-passengers-in-2020-due-to-covid-19-pandemic>

<sup>2</sup> An Bord Pleanála Strategic Infrastructure Determination  
[https://www.ringaskiddyportredevelopment.ie/index.cfm/page/vol\\_iiia\\_appendices?twfId=432&download=true](https://www.ringaskiddyportredevelopment.ie/index.cfm/page/vol_iiia_appendices?twfId=432&download=true)



provision for rail, increasing connectivity, and reducing the sole dependence on roads for freight transport.

**Key goal : Port and Airport Facilities**

Provide rail service to both Cork Airport and the Port of Cork facility at Ringaskiddy.



**D. Areas Examined : Tourism and the Wild Atlantic Way**

Tourism has been one of the key strengths of the West Cork economy for several decades, drawing on much of the region’s natural beauty to attract tourists. In particular, the Wild Atlantic Way has strengthened many of these touristic links into a single brand, further popularizing visits to West Cork. The potential for the Wild Atlantic Way to benefit from rail tourism is also immense, especially through strong links and connections with WAW sites, tourist boards, and branding of rail holidays. There may be many successes in connecting Cork Airport with these scenic towns and Wild Atlantic Way sites (See section 2C). There is also a strong link between supporting West Cork towns and generating tourism, as the natural beauty and strong appeal of these towns makes them destinations in and of themselves. There is also the potential in growth of the day-trip and short-stay sector, especially owing to recent efforts to promote holidaying in Ireland.

There is also the opportunity for specific train tourism - one can imagine the popularity of tourist train services running the entirety of the West Coast of Ireland, from Donegal to West Cork.

**Key goal : Tourism**

Connect as many touristic sites as possible, especially those as part of the Wild Atlantic Way, to further develop the WAW and day-trip/short stay industries. Priority should be given to major sites, whereas minor sites should be connected wherever possible and practicable, taking into account geographic concerns wherever possible.

### E. Areas Examined : Industry and Rail Freight strategies

Iarnród Éireann recently announced their 2040 Rail Freight Strategy. While the improved focus on usage of rail in freight strategies is welcome, this was criticized for not going far enough to improve connectivity to areas of major industry, especially taking into account the major growth in Irish ports post-Brexit. The growth of the Irish medical sector during the Covid-19 pandemic is also an avenue to be supported. Secondary activities can be supported as part of growth strategies through the benefits and increased connectivities which rail can provide. Likewise, there are also environmental benefits to the reduction in HGVs on the road, especially if replaced in part with usage of electric freight trains. As seen in Section 2C, there are also major benefits for speed and competitiveness by connecting these centers with the Port of Cork at Ringaskiddy.

**Key goal : Industry and Rail Freight Strategies**  
Provide connection and opportunity for the growth of the rail freight sector in West Cork, primarily by connecting the Port of Cork at Ringaskiddy with centers of industry.

### F. Areas Examined : City Connectivity

It can be assumed that in an ideal scenario, Kent Station will serve as the end point for any potential rail corridors. This ensures that the West Cork network is not isolated from the rest of the national rail network. In doing so, these routes also pass through areas of the city, providing the opportunity for increased rail connectivity for city residents, further increasing network usage, as well as improving the financial viability of these corridors. There is opportunity for stations within the Cork City area to provide this connectivity, improving Cork City's transport options as a beneficial side effect of improving those of West Cork.

**Key goal : City Connectivity**  
Provide a connection between West Cork rail routes and the national rail network.  
Provide connectivity to city residents in areas which these corridors will pass through.



## SECTION THREE : ISSUES AND CHALLENGES

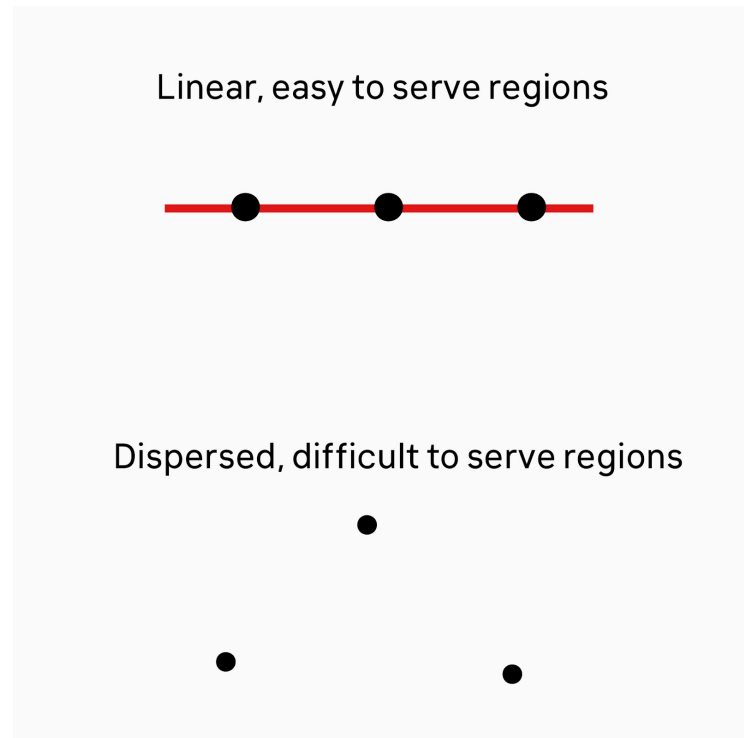
In this section we examine the challenges which exist at a broader level, such as geography, topography, and spatial dimensions, and how these intersect with efforts to bring rail to West Cork.

### A. Spatial Issues

In transport planning, there are areas and regions that are considered easy to serve, and those that are considered difficult to serve. The easy areas possess a variety of well-populated settlements within relatively close proximity, in a roughly linear pattern. Naturally, this makes it far easier to run a rail line to connect these areas. This also results in a greater percentage of the population being connected by rail. It may be possible to serve more people with a need for fewer lines (one line may be able to connect all major settlements), and there is reduced need for rail spurs. An example of this is the main Cork-Dublin InterCity trunk, which runs through a variety of well-populated towns, in relative proximity to each other.

The difficult areas, in contrast, are rather dispersed in nature, with no clear clustering of settlements into distinguishable patterns. There may be large gaps between settlements which raise travel times and project cost per kilometer. There is more effort needed to ensure rail service is accessible to a large amount of people. There are also trade-offs in where service reaches - dispersed areas may have to choose which areas to connect. In order to satisfactorily connect all relevant areas, they may need to use spurs, which always results in halved frequencies after a certain point, and there may also be more lines needed to connect all areas. An example of this may be Donegal, in which major settlements are distant from each other, often on geographically separated peninsulae, making satisfactory connection in the region more difficult.

West Cork is somewhat of a center ground. While there is difficulty in connecting every area, it is possible to cluster all larger settlements into three main trunks, as will be explored in Section 5A. There is no real need for 'hard choices' in which areas should receive connection as opposed to others. There are some sub-areas in the region where the route becomes obvious upon examination (such as the Cork-Macroom corridor), and there are others where the nature of connection is more of a debate. (see the example of Kinsale, in section 5E).



*A visual aid showing easy regions vs. difficult regions. For the easy region, a single line connects the major settlements. For the difficult region, there are a number of options - such as bypassing one town, utilizing a spur (with the side effect of infrequent service), or using an additional rail line.*

## B. Topographical Issues

Cork possesses two major topographical issues which have important repercussions on the ability to deliver rail to West Cork.

The first is marsh - Cork, simply put, is built on marshland. Many cities, when running a new rail corridor through the urban core, opt to use underground tunnels for at least part of the route, especially when there are noted difficulties in running such a line through the urban core of a city. In Cork, a city built on marshland, the logistics and effort (not to mention cost) of building such tunnel segments are significantly increased. While, owing to Cork's relatively small size, and Ireland's general hesitancy toward building underground train tunnels, this may be a moot point, it nonetheless rules out an effective and commonly used tool for rail connectivity. This challenge is further explored in the section 4F.

The second challenge, and arguably a far greater affair, is the geography of County Cork. The topography of Cork is extremely varied, with many sections being flat or nearly flat, while others are notably hilly or mountainous. Naturally, it is easiest to run trains across an entirely flat area - though, as the saying goes, Ireland is built like a saucer, with flat in the middle, with hilly and mountainous edges. As will be seen in Section 5, realizing and actualizing ideal connections becomes far more difficult because of the geography. There is often greater cost involved, because of the need for additional bridges or water crossings.



*West Cork possesses a varied topography*

However, these challenges are not a complete roadblock - railways ran through West Cork before, and its geography has changed little in the intervening time. What has changed is developments in engineering technology, bridge-building methods, and planning software, that make mitigating these barriers even more possible than over a hundred years ago.

There are, as such, ways to address these geographic challenges. One of the simplest, is through either paralleling or mirroring existing roads and motorways. The motorways are often

on the flattest areas of the county. There is sometimes space left alongside the motorway, or agreements in place for ease of use of Compulsory Purchase Orders (CPOs) in the case of a perceived need to add additional lanes to the motorway, or for the construction of bypasses. Paralleling, or being built over the motorway may simply be the easiest path to take in terms of dealing with geography. This is common practice elsewhere in the country - the Cork-Mallow section of the mainline rail network follows the M20 closely, and other sections of the Cork-Dublin route in Leinster often travel in proximity to the M7.

In other countries, and in the construction of other railway systems, this is also a common tactic to surmount geographic barriers. Other versions of this include the building of railway bridges - elevated segments of rail running above a road, in the fashion of an elevated railway.

As will be discussed in Section 4E, the tram-train concept also allows for shared usage of road space in areas where any connection would be impossible otherwise, such as tight corners or geographically difficult junctions. There are also historic elements of infrastructure remaining which provide use in surmounting barriers in reviving the railways, as will be mentioned in Section 3D. Of these, the most famous is the Chetwynd Viaduct (known simply as The Viaduct), which formerly brought the Cork, Bandon, and South Coast Railway over what would become the N71, and is earmarked for use as a future greenway. Other elements still exist, such as the Goggins Hill Tunnel (Ireland's longest abandoned tunnel), and the Kilpatrick Tunnel near Bandon. While these pieces of infrastructure have been unused for decades, many remain in 'good quality', and their refurbishment to modern standards may provide an important role in connecting key areas.<sup>3</sup>

### **C. City-County Interaction**

Both Cork City and County have been deprived of transport for many decades. Any lines that provide rail service to West Cork are going to join the national network at a given point, and will invariably pass through sections of Cork City as it does so. There are significant challenges that will be associated with connecting the county-running parts of the network with the national network at Kent Station, though there are also major benefits and opportunities that come as a result.

One of the foremost benefits is that the sections of track that run through the city have the ability to provide connectivity to those living in proximity. Just as many intercity networks serve stations in the Dublin Region, so too can urban stations on the West Cork lines provide service to those in Cork City. These city-running elements of track also improve many viability aspects of these lines - should there be questions over the financial benefits or effectiveness of lines, the fact remains that many key numbers (such as ridership, cash intake, and road journeys reduced) will be supplemented by increased ridership from those in these semi-urban and urban areas, albeit for shorter trips. There are also other well established reasons behind this, such as the promotion of more sustainable land use policies (including new denser developments built around urban stations), as well as connecting important pieces of city infrastructure.

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Kilpatrick Tunnel - National Inventory of Architectural Heritage  
<https://www.buildingsofireland.ie/buildings-search/building/20909645/kilpatrick-tunnel-kilpatrick-cork>

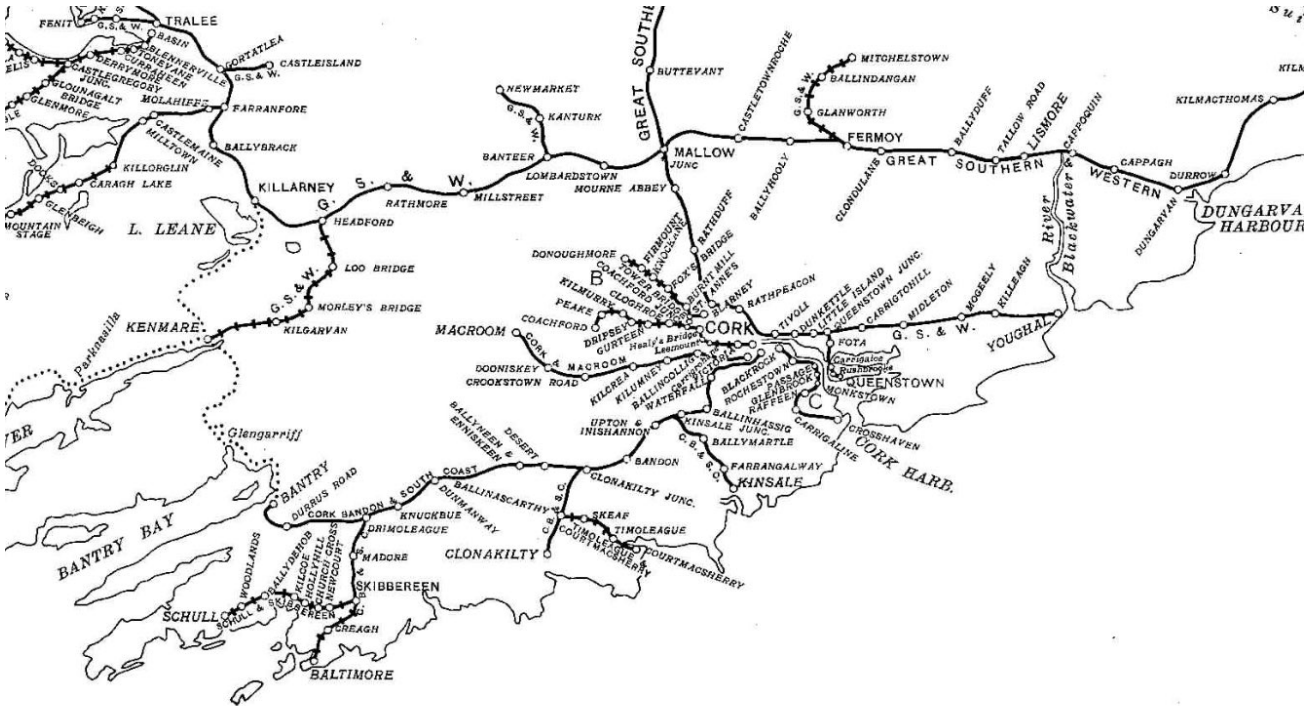
Proper implementation of this is key to ensuring that a functional service is provided to those in the city area, while not impeding on the main goal of providing service to towns and areas in West Cork. One of the main difficulties in this sector is exactly how to provide such connections, and the logistics of doing so. Owing to the depth of discussion around joining these corridors to the national network at Kent Station, section 4F in the System Implementation Section is devoted to this discussion.



*Elevated railway bridge in Hamburg, Germany*

### D. Historical Railways and Legacy Elements

Bringing railways to West Cork is far from a new concept, and until 1961, passenger railways connected major towns and villages with Cork City. In examining modern applications of such a system, it is useful to examine the strengths and weaknesses of the past routes, and how they can provide insights on how to surmount challenges discussed.



Hand-drawn map of West Cork's railways from 1909, by the Vice Regal Commission on Irish Railways

There were four corridors operating within West Cork :

- The Cork and Muskerry Light Railway operated from 1887 to 1934, connecting Cork City with various towns in the county northwest of the city. This was a narrow gauge railway, serving areas such as Donoughmore, Blarney, and Coachford, linking to the terminus at Cork Western Road. Parts of track were shared with the Cork City Tramways.
- The Cork, Blackrock, and Passage Railway operated from 1950 to 1932, running along the coast of Cork Harbour. This was an Irish standard gauge railway, and later converted to narrow gauge. This connected many notable towns, such as Carrigaline, Passage West, Monkstown, and Crosshaven with a station at Cork Albert Street. A former section of track now comprises the urban Passage Railway Greenway.
- The Macroom Direct Railway operated from 1866 until 1935 as a standard gauge railway, running from Cork City to the relatively nearby Macroom Railway Station. It initially shared a city terminus with the Cork, Bandon, and South Coast Railway at Cork Albert Quay, before changing to one at Cork Capwell Road. While primarily connecting Cork to Macroom, it also served Ballincollig and Bishopstown (then far smaller settlements), as well as intermediate towns.

- The Cork, Bandon, and South Coast Railway was the longest and largest of all the Cork railways, and probably best fulfils the ideal of a 'West Cork Railway'. This railway was in operation from 1949 until 1961, and operated as Irish standard gauge. The main trunk of this railway operated from Cork Albert Quay to Bantry. A number of spurs split off from, and connected to this trunk, sometimes using different gauges. These included :
  - The Kinsale branch, splitting off after Ballinhassig
  - The Clonakilty branch, splitting off after Bandon
    - From this, the Timoleague and Courtmacsherry Railway, a light railway, joined at Ballinascarthy
  - The Skibbereen branch, splitting off at Drimoleague
    - From this, a light rail alignment connected Skibbereen to Baltimore, and another alignment to Schull.

A sizable amount of infrastructure was in place to support this network, such as the Chetwynd Viaduct and the Goggins Hill Tunnel. Despite this, many issues were noted with this network, such as low frequencies, poor quality connections, and an inability to make a same-day return journey to Dublin. These railways were subject to damage during both the War of Independence and the subsequent Civil War. Additional difficulties were faced due to the coal shortages during the Emergency. During the 1950s and 60s, with the railways under the control of the railway division of Córas Iompair Éireann, processes of rationalization (i.e., mass closure) occurred, with these routes all facing closure despite intense local opposition. Arguments were made on the basis of low passenger numbers and economic unviability. The increase in car usage, coupled with government policies designed to elevate car usage above that of public transport also played a factor. The routes were not mothballed, but rather torn up in their entirety, with many of the lands being sold to Nigeria, or to local farmers for use as fences. These system closures would prove to be regrettable in the long term.

Nonetheless, the legacy of these systems lives on. Key factors in the economic perspective - infrequent service and poor connectivity - are notable to avoid to ensure passenger use (and therefore economic viability) of a system.

The Cork Commuter Coalition would also like to request that relevant government and state parties make updated versions of historical railway maps available. At current, many of the popular images used to emphasize the gulf in previous vs. current networks are low quality or contain significant omissions. One popularly used image is that of the 1909 Vice-Regal Commission that details the extent of the railway network at its peak. While valuable from a historic perspective, it is rather disappointing they are still in use by proponents, over a century on from its drawing. These days, we have computers. There have been efforts by both individual designers to update maps for viewing by a public audience, and have been done so to a high quality.<sup>4</sup>

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<sup>4</sup> Mapped: historical public transit systems v their modern equivalents  
<https://www.theguardian.com/cities/2019/apr/03/mapped-historic-public-transit-systems-v-their-modern-equivalents>



## SECTION 4 - IMPLEMENTATION OF SYSTEM

In this section, we examine the more specific issues relating to the implementation of a system, such as connection of areas, service types, and the infrastructure which will serve the system.

### A. Electrification

There is virtually no solid reason as to why these routes should not be electrified from the get-go. Electrified services provide faster, cleaner, and more reliable services in comparison to those that use diesel units. It also eliminates any potential costs incurred by the need for electrification at a later date. Electric trains are also key in achieving decarbonization of the rail network, and of increasing decarbonization of the transit system as a whole.



*The future of the DART, currently Ireland's only electrified railway*

### B. Service Type

Iarnród Éireann currently operates two different types of service - Intercity and Commuter. With infrastructural investment, both of these types of service can be supported, while also examining the potential for the introduction of a regional rail model, as well as hybrid regional-commuter models. These four types of service all possess benefits and detractions, with some being more suited to the provision of rail service in West Cork.

### ***i. Commuter rail***

Commuter rail focuses on the main goal of transporting workers from the areas they live to the areas they work, typically the central business district (CBD) of the nearby city. Because of the frequency of stops, there is little focus on attempting to run at high speeds (which require a speed buildup) as the train stops so frequently, thus allowing more flexibility in the areas the system can serve - under a commuter rail style service, there may be more deviations from the optimum path to serve smaller communities which would otherwise not get service.

However, this may also be seen as simply 'commuterizing' many West Cork towns and villages, and applying a (sub)urban concept to a mixed-rural area. Rail service for West Cork may need to operate differently to serve the needs of residents, as opposed to assuming its main use would be for commuting trips to Cork City and back according to a traditional working schedule. Over long distances, frequent stops add significant time delays to the system, reducing competitiveness with private cars.

In the context of West Cork, commuter rail would resemble service patterns seen in the DART and other commuter services, with frequent service during peak commuting periods, and infrequent service throughout the rest of the day.

### ***ii. Intercity***

The Intercity is one of Iarnród Éireann's main service brands for train travel between major towns and cities. Fewer stops, often only stopping at major towns and amenities along the route. For instance, the Cork-Tralelee route, of a length of 95 kilometers, only possesses 5 intermediate stops. As such, higher speeds are possible on these routes because of the less frequent stops. These services are less frequent than all other service types, with the most frequent (the Cork-Dublin route, 225km) only possessing 10 trains per day.

However, given the relatively short distance that many of the lines will take, this might be less than ideal - the proposed trunks range from 35km to 100km, a relatively short distance in comparison to some of the other routes. Bypassing areas which would benefit from service - for instance, a town of 400 people along a rail corridor would likely justify a station in a regional rail system, but not justify a station in an intercity system. As such, a higher population threshold is required for a station. It also sidelines non-town destinations that may be popular travel destinations, such as sites on the Wild Atlantic Way. (See section 2D) Owing to West Cork's largely dispersed population and tourist-based economy, this may not be suited for the optimum success of the region.

### ***iii. Regional rail***

Regional rail operates over a wider area and with fewer stops than commuter rail, but at lower speeds than intercity. In a difference from commuter rail, regional rail operates with evenly distributed service throughout the day, though sometimes with slight peaks at commuting times. Regional rail often connects small and medium sized towns at the periphery of urban areas. The number of stops may be similar to commuter rail frequency, or lie in between commuter rail and intercity rail numerically. Regional rail, as the name suggests, is intended to connect towns and areas throughout a region, and may involve greater focus on connections that do not rely solely on connection to the city.

In the context of West Cork, this would resemble mid-frequency service all day, (2-3 trains per hour, 20-30 minutes) across a high intensity of stops.

#### **iv. Mixed regional**

A mixed-regional service pattern occurs where a system resembles a regional or intercity service on the outer areas of the line, but resembles a commuter service within the inner parts of the city. The aim of this is to provide rapid transit-style service within city areas. This operates similarly to the regional system discussed above. Aspects of this area are addressed in Section 3C. Elements of this can be seen in a number of systems elsewhere in Europe. For instance, France's RÉR Line A operates over a 125km distance, with distant stops in outer and peripheral areas of the Paris Region, but with metro-style frequency in the central city region.

In the context of West Cork rail, many of the key corridors which we have identified pass through Cork City, and pass by key population centers that lack frequent public transport. Under a mixed regional system, there would be a higher density of stops within the city area (perhaps mirroring the DART, where there is a station roughly every 1 kilometer) than in the rural areas in which it serves (where there may be a stop every 3-5 kilometers at its most frequent).

Vehicle type used may also differ depending on the service decided on. There may be different cases for different proposed rail corridors, especially taking into account the different length of the three proposed lines, and there may also be the possibility to operate different types of service on the same line. For instance, on the Bantry-Cork corridor, an intercity service may be favored for the entire line, with a mixed-regional service preferred along the Bandon-Cork segment.



Inchidoney Island, Clonakilty

**v. Summer Service**

Many railways in touristic areas have different schedules, patterns of service, or even route termini during seasonal tourist peak months. West Cork, especially beaches and tourist sites, experiences peaks of tourists during the summer months. It is possible that service to some areas (Fountainstown, for example) may operate seasonally only, due to comparative lack of demand during off-peak months. This pattern of operation may provide a more tailored service, and yearly reconfigurations of service may allow for better allocation of resources during the year as a whole.

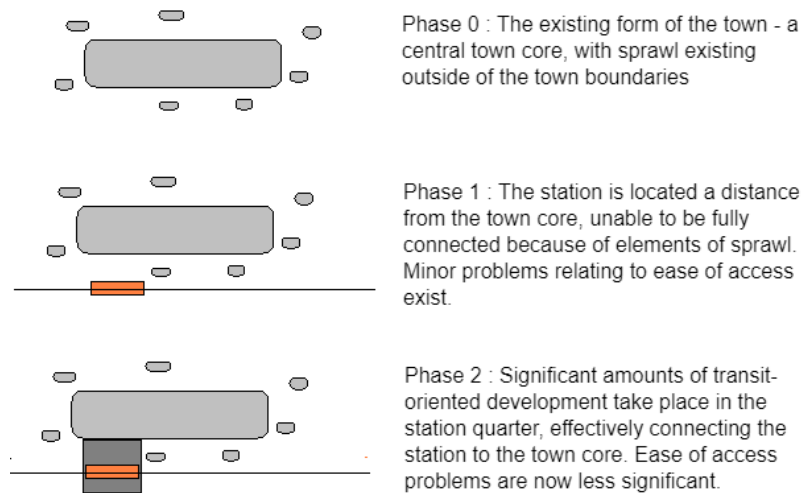
However, as many towns are popular destinations in and of themselves (as discussed in section 2D), operation of seasonal services may be less suited to the success of the region. One recommendation is that decisions around more tailored service can be taken at a far later stage, when there is sufficient data on usage patterns available.

**C. Station location**

There are initial issues raised with finding suitable locations for the placement of stations along these corridors, especially in areas near towns.

Patterns of ‘one off housing’ has ensured that there will be increased navigability necessary in deciding the placement of stations. Most towns in rural Ireland sprawl beyond the town limits, with many shops and houses located in the vicinity of the town, but not in the town proper. Towns in West Cork are no exception. This dispersed location of housing and amenities in the town hinterland creates challenges for the routing for rail lines in close proximity to town centers.

Because of this, location of stations in the town core, where they would be best situated for ease of access, as well as furthering urban renewal within town centers, is often rather difficult. In addition, where there are suitable greenfield or brownfield sites to locate such a facility, there is also little guarantee that there would be sufficient space for the rail route itself. Taking into account topographical factors at the same time, this makes finding a lot of suitable sites difficult, especially in larger towns that will benefit most from services. While one solution is to be liberal in usage of compulsory purchase orders of land in the surrounding area, this is generally not a satisfactory solution wherever it is avoidable - as well as adding cost, excessive use of CPOs often creates local opposition to infrastructure



schemes, sometimes necessitating undesirable compromise solutions and generating tension within the community.

As such, for many towns the only choice is to locate the station on the periphery of the town. This comes with both challenges and benefits. There is less ease of access - however this is on a far reduced scale as opposed to such a scenario in city areas. This lost ease of access can also be mitigated with investment in new pedestrian and cycling infrastructure.

There is the advantage of the increased availability of greenfield land for development around the station. Many transport projects foster 'transit-oriented development' - where the location of transport infrastructure allows for the construction of new housing and other forms of development in the surrounding area. Many towns and cities see the development of 'station quarters' around new or upgraded train stations, most notably the plans for Galway's Ceannt Station Quarter, though development of housing has also seen the growth of previously minor towns such as Glountane.

This is likely to be aided by various planning, development, and rezoning schemes which will likely accompany the construction of any stations. There is a trade-off here - instead of the existing town center being developed as a consequence of a new station, it is instead dependent on the fate of the town economy as a whole. This also has the longer term effect of reducing problems with ease of access, as proportionately more of the population is located in closer proximity to the station.

Naturally, each application of station location will differ from station to station and town to town - with a project that will likely encompass dozens of stations, some will doubtless find that rails are easier to place than others. Nonetheless, it should be the aim of planners to locate any stations no further than a kilometer away from the town center, wherever practicable.



## **D. Traditional Train Concept**

As one might imagine, the general intent of restoring railways to West Cork generally assumes that the standard of infrastructure will be identical to those elements found elsewhere in the national rail network. There are, of course, advantages and disadvantages to this.

Naturally, if the system operates according to the same heavy rail standards as the rest of the network, there is the possibility for interchange and connection with the rest of the system, and the use of regular or occasional services from areas in West Cork to areas elsewhere on the network. There is added familiarity with the operation of the system if the train system is identical to those used elsewhere in Ireland. While the trains are more expensive owing to Ireland's unique gauge width, existing negotiations with manufacturers ensure that there are templates for vehicles readily available, and there is decreased cost in the design phases. It is also possible to use existing vehicles on these routes. For example, the DART is phasing out its existing rolling stock in favor of newer, modern trains. It would be possible to use some of these vehicles on the new routes to reduce the costs involved in the purchase of an entirely new fleet of trains.

## **E. Tram-train concept**

However, an alternative option is the usage of the tram-train concept. A tram-train is a system which meets the operating standards of both a tram and a train - operating as a train along some parts of the system, and as a tram in other parts. This works by using a common gauge for both the tram and train sections, and allowing vehicles to be connected to both the tram and train power sources. Other elements are also co-ordinated between the 'train' and the 'tram' aspects, such as station platform heights. This reflects the different needs for the system in different areas, as well as a potential solution to geographic or other challenges. In this, the tram-train draws upon many of the advantages of both systems. As discussed in section 4F, there will be significant difficulties in actually joining this into the center, to the point that it may impact the success of the system overall. A tram-train would be able to link with infrastructure for the Cork Light Rail corridor in the city center, circumventing the need for specific heavy rail infrastructure in the center of Cork City. The decision for gauge usage has not yet been finalized according to public plans, and may differ from the standard gauge of the Dublin Luas. The ability to use either heavy rail tracks or light rail tracks is also an asset, and provides additional flexibility for any geographic challenges that may arise (see Section 4F and discussions about geography in Section 5). The implementation of such a system may also prove to be cheaper than a heavy rail system, as light rail is comparatively cheaper to build, especially in this scenario, which may otherwise necessitate higher usage of bridges in the city center.

This does not mean that instead of an Iarnród Éireann intercity train traversing the Cork-Skibbereen line, it will be a Luas vehicle, but instead that there will be vehicles more suited to the line.



*A tram-train vehicle operating in Hungary. The newly implemented system runs between the cities of Hódmezővásárhely and Szeged. In this image, the tram-train is running on an urban section of track.*

Nonetheless, there are drawbacks and trade-offs to the implementation of these corridors using the tram-train system. There is a danger of ‘tramification’ in the urban areas, where they are expected to fulfil the role of a tram, as opposed to the role of a train. Indeed, the provision of separate infrastructure in some parts of the city will still be necessary, and additional problems would be raised if it were expected to share the entire city-running portion of track with a Luas system, as this would impede speeds within the city area, as well as simply duplicating service to areas already served by the Luas system. For example, the Cork-Macroom segment will likely pass through the city for up to a third of its total length. If it were expected to fulfil the role of a tram for this sector, it would reduce operating speeds

This may be most effective if it shares part, but not all of the urban tracks with the light rail corridor - perhaps elements joining toward Kent Station and travelling through the city center area, but running on new tracks in the suburban regions wherever possible.

### ***i. Tram Train and Gauges***

However - use of the tram-train concept further complicates any consideration of intercity trains connecting West Cork and areas on the mainline rail service outside of West Cork, effectively creating an isolated network area - especially if it uses a different gauge (as the Dublin Luas uses a different gauge to the national rail network). However, this may not present a large problem, as historically there was no direct connection between West Cork railways and other stations outside the West Cork region. Indeed, the logic of continuing the Cork-Dublin route further south beyond Kent may not be solid. It may be the case that even if connectivity were not an issue, that the trains would not continue past Kent.

In addition, one city, Zwickau in Germany, operates the world's only dual-gauge tram-train system, as both the mainline rail and tram system share track in the center of the city, albeit at different gauges. As such, one rail is shared, with different second rails for each mode. While implementation of this is possible, its uncommonality suggests that it is more difficult (though not impossible) to manage in comparison to single gauge systems.

While such systems were popular in the past - known as interurbans, systems using light rail technology over longer distances were especially common in the United States from the period 1900 to 1930 - these have largely fallen out of favor, though this seems to be through general decline in public transport usage in the period, as opposed to any factors rendering them obsolete. A few systems in this style remain, notably the Kusttram in Belgium, which connects towns along the Belgian coast over a distance of 67km. If completed according to the tram-train concept, the Bantry-Cork segment would become the longest light rail/tram-train corridor in the world.

### ***ii. Freight and Tram-Train***

Despite the advantages that the tram-train concept can have for passenger rail, it also complicates the secondary objective of movement of rail freight. This occurs because of the potential lack of interconnectivity with the national rail network if differing gauges are used. As such, technologies may be required to transfer cargo from tram-train vehicles to heavy rail freight vehicles. There is also the question of whether there is sufficient space to construct a transfer station in the Kent Station region, or whether it must be done elsewhere in the region, adding further difficulties. However, containerization of freight has rendered this less of a concern than in previous decades, as freight can be transferred with relative ease.

This is not likely to be a major concern for freight origination within the West Cork corridors which will potentially use a different gauge (such as Macroom to Ringaskiddy freight routes), and the issue of differing gauges is sidestepped entirely if the Cork light rail system uses the same gauge as the national rail network. It seems that one of the largest trade-offs of utilizing the tram-train is that it makes freight more difficult, but carrying passengers more easy.

## **F. Geographic Issues of Connecting to Kent Station**

As mentioned elsewhere in this document, there will be significant challenges in connecting new rail corridors to the national rail network at Kent Station. scenario is even more altered given the rapid suburbanization that occurred around the time that many of the original railways were destroyed. Below, a variety of potential solutions are discussed to address the issue of this connection.

### ***i. Connectivity to existing rail***

The 'path of least resistance' would likely be to connect new routes to existing rail. This would likely take the form of a 1 kilometer long railway bridge somewhere north of Passage West that would connect to the Cork-Cobh segment of the line / a connection north of Ballincollig and through Blarney to the existing portion of the Mallow-Cork line segment. This would



accomplish the key goal of providing connection to Cork Kent Station, as well as the network at large. It is also likely to be the cheapest of the available options.

However, there is significant loss in potential ridership by doing this. For instance many inner areas of the city that would benefit from rail connectivity, and would see this connectivity materialize through the connecting portions of new railways, are simply bypassed. This also may have significant time delays on the overall service, as the more circuitous routes which these lines would require add significant time delays, impacting the quality of service.

*Evaluation and potential application : This would only be the option when all other feasible opportunities have rendered themselves untenable.*

### **ii. Underground tunnelling**

If connecting to existing rail is the path of least resistance, then this is the path of most resistance. Underground tunnelling in any form would drastically increase the costs associated with the plan. There would also be significant difficulties with the drainage and geography of Cork City, which would likely require deep tunnelling and remove possibility of cut-and-cover techniques. For instance, at its most conservative usage, underground tunnelling would begin near Wilton, and last for approximately five kilometers until Kent Station, passing northeast through Togher, Deerpark, and the South Inner City area. There have also been a number of difficulties with underground rail projects in Dublin in recent decades, and the possibility of such a fate being replicated in Cork is not impossible, resulting in lengthy project delays before construction even begins.

*Evaluation and potential application : While probably the most elegant solution, the costs and effort involved with this option make it the most difficult to foresee, and may render large elements of the project politically and financially untenable.*

### **iii. Urban Fringe Station**

There is the potential to avoid much of the issues with implementing a rail line in the urban core by simply locating the terminus for West Cork rail lines at the edge of the city center. Previous rail lines have had termini at Capwell Road, Albert Quay, and Victoria Cross, though this was at a time in which suburbization was far less prevalent (and all of these sites are notably closer to the core than any potential urban fringe stations in the modern day). This also avoids the need for increased works at Kent Station, where an additional through-running platform is currently being added as part of works for the upgraded and electrified commuter rail network. Sites near Wilton or Frankfield could be considered, given the location of green areas here that are close to the urban core, though still possess space for development. Connectivity to the city could be provided using alternate forms of transport - for instance, a 3 kilometer spur off the planned Cork Light Rail corridor between Dennehy's Cross and such a potential site near Wilton.

Like Option 1, this does negatively impact the potential for increased ridership within the inner areas of the city. This also creates problems for those who wish to travel onward from West Cork to elsewhere using the mainline network, preventing closer co-ordination of

timetables, and increasing the time spent transferring between services. This also has the potential to mirror the undesirable Heuston/Connolly style split between major service termini in Dublin - to be noted is that the solution to this is the decades-mooted Dart Underground rail tunnel.

*Evaluation and potential application: While this has the benefit of creating a secondary transport hub in Cork, there will likely be a significant gap in connectivity between this and Kent Station. It also loses out on providing rail service to many parts of the Cork urban core. This and the 'Connection to Existing Rail' are close in effect.*

#### **iv. Motorway Mirroring and Use of Railway Bridges**

One potential solution involves rail tracks following the path of existing motorways, on the ground if there is sufficient space for track to parallel motorway, and using above-road railway bridges otherwise. The location of these, wherever possible, along existing main roads, to eliminate tension over planning permission, and to utilize existing public land. For instance, railway bridges running over the N27 into Cork City would allow a connection to Kent Station with reduced difficulty in comparison to other options, while still allowing for urban rail stations and a cost-effective connection to the national rail network. Taking into account recent studies into living in proximity to motorway and rail noise, noise dampeners should be used wherever possible. There may also be concerns over the visual impact on the skyline of Cork City, though of course it is possible to design bridges that contribute to a city's beauty, not detract from it. Many rail systems utilize railway bridges, especially when engaging in urban-running segments. An example of one such railway bridge is Dublin's famous Loopline Bridge, linking rail services from above and below the Liffey. This would effectively create a 'semi-elevated railway' within Cork's urban core.



Naturally, as bridges are less bound to geographical concerns, there may be greater flexibility in determining the direction, especially owing to Cork’s general low-rise cityscape, and there is less need to secure entire corridors of expensive land within the urban environment. Bridge height will likely be a major point of later discussions.

In addition, use of the tram-train concept as discussed in Section X would likely involve a mix of railway bridges and/as shared infrastructure, though slightly altered routes may result in need for fewer bridges and more ground-running segments.

*Evaluation and potential usage : This is likely the option that generates the optimum outcomes while minimizing the discussed negative effects, though is rather finicky in deciding where bridges should run, and will likely have the highest impact on the cityscape.*

**v. Tram-train and Urban Connectivity**

Use of the tram-train concept also presents additional options for connecting to Kent Station, as it will be able to utilize light rail infrastructure in certain parts of the city - reducing the cost and effort in places, and likely presenting an easier option than heavy usage of bridges. This also circumvents several of the discussed options, as an urban fringe station becomes redundant when it becomes easier for the trains to connect to the center. Naturally, there are the discussed dangers of too strictly mirroring a tram-style system in the city center.

**In brief...**



*Underground tunnelling will likely remain a fantasy...*

- There are noted challenges with connecting every town or major amenity in West Cork, and there are no simple solutions to provide connectivity to the majority of areas and population in West Cork.
- The hilly terrain of the region means that sometimes the optimum path is geographically difficult to choose without significant investment in bridge, viaduct, or tunnelling capability.
- There are difficulties in connecting potential railway alignments in West Cork with transport hubs Cork City, owing to the built-up nature of the urban core. There are a variety of potential solutions, each with advantages and disadvantages.
- The usage of the 'tram-train' concept applied to these potential intercity services may present an option that is more 'tailored' to the challenges of the region, and help address difficulties in the scheme.



*Dublin's Loophline Bridge*

## 5. POTENTIAL ROUTE ALIGNMENTS

In this section we examine potential route alignments for rail corridors, taking into account the issues discussed and analyzed in the previous sections. While reference has been made to some of these areas in previous sections, here they will be analyzed in full. This will occur by using the location of major towns as a base, assuming that as the general intent of the network. From this, additional factors will be added to the analysis, with subsequent alterations to the proposed corridors to best accommodate the inclusion of these new factors. This will be looked at according to each proposed corridor. In some cases there is a trade-off, such as connecting one amenity or town over another. Each choice will be examined again during the end of the section.

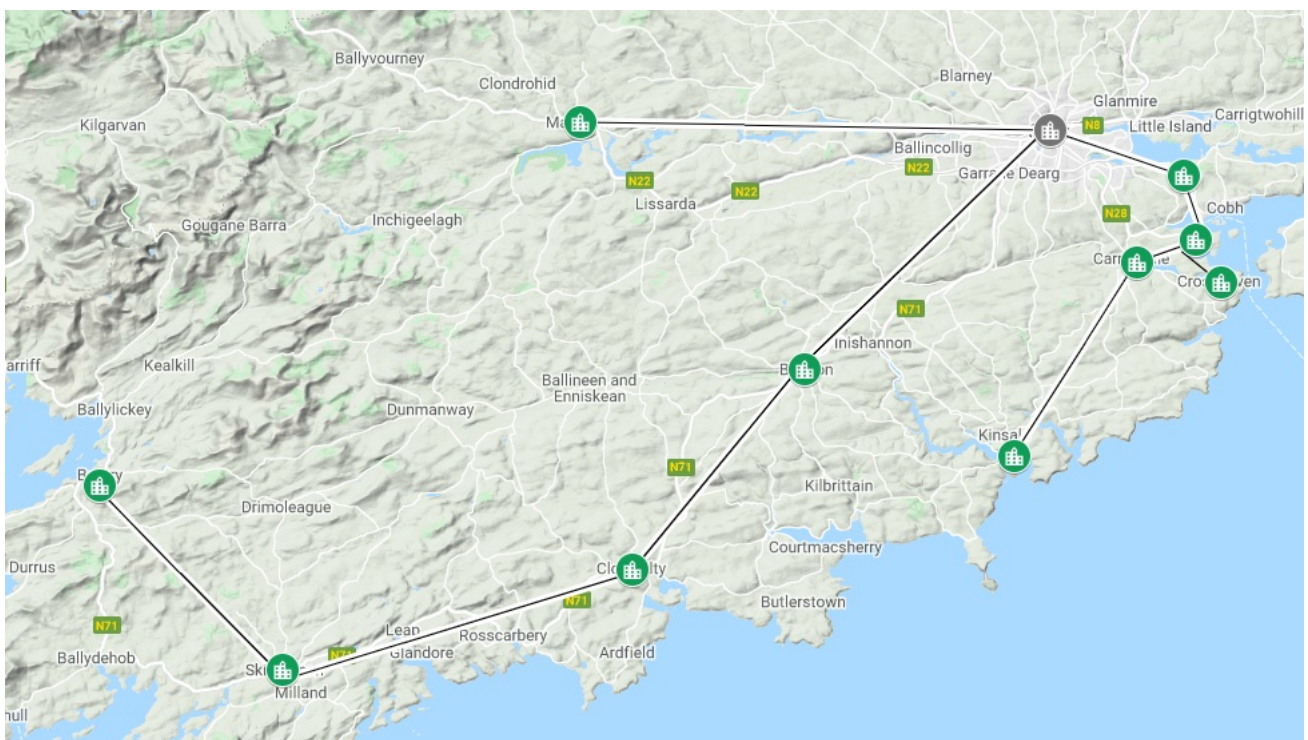
Geographic factors, such as topography and elevation, will be referenced throughout each of the latter sections.

As stated in the introduction, this is not a formal proposal, but a visualization of the previously discussed factors. There is room for discussion and differing opinion on each of the sectors. For this reason, there is not a detailed analysis of precisely where the route should go, what scenario should happen with chokepoints, or what farmland should receive a CPO. While these elements may be mentioned when looking at each alignment, there may also be alternate solutions or approaches not discussed.

### A. Potential Alignment O : Ideal route, major towns only

This alignment uses the sole objective of connecting major towns with Cork City, taking into account zero other factors, such as geography, other amenities or urban access. The ideal form here takes into account three lines, which are lettered for ease of understanding :

- Line A : Cork-Macroon (approx. 33km)
- Line B : Cork-Bandon-Clonakilty-Skibbereen-Bantry (approx. 87km)
- Line C : Cork-Passage West-Ringaskiddy-Carrigaline-Kinsale (approx 36km)
- Line C1 : Crosshaven Spur (approx 4km)





***i. Line A***

The line alters from its initial direct Macroom-Cork position to take into account several towns along and south of the N22, such as Lissarda, Crookstown, and Aherla, many of which were previous stops on the Macroom Direct Railway. After Aherla, the line veers north towards Ovens, before meeting the city boundary. Areas inside the city will be discussed in section 5D. There is a distance of between 3km and 8.5km between stations.

The decision was made to route the line south to these towns, as opposed to north to Crookstown. As well as the fact that there is a greater population south of the N22, this area is also less hilly, and as such better suited to the running of a rail line. There is also the confluence of the River Lee to contend with in this section, and presents less of an issue (and less need for additional bridges) should the track veer south instead of north.

Owing to these discussed factors, it may be most convenient for the corridor to mirror the N22 wherever feasible.

***ii. Line B***

Line B sees many small alterations to serve a number of intermittent communities. The section in-between Cork and Bandon now veers southeast to link Ballinhassig, Waterfall, and Innishannon. There is no major change between Bandon and Clonakilty. The Clonakilty-Skibbereen segment is altered slightly to provide service to Rosscarbery and Leap. This section could serve either Leap or Union Hall, as both towns are of similar population sizes. As such, geographic factors may be the primary determinant of which area is best poised to receive service. There are likely to be additional geographic challenges in this segment, as this area is hillier, and crosses more bodies of water than further north along the route. After Skibbereen, the route veers west and north to serve Ballydehob. This adds approximately 6km to the route, though is likely to present an easier route to plan, owing to the potential to mirror the N71 along this alignment.

***iii. Line C and C1***

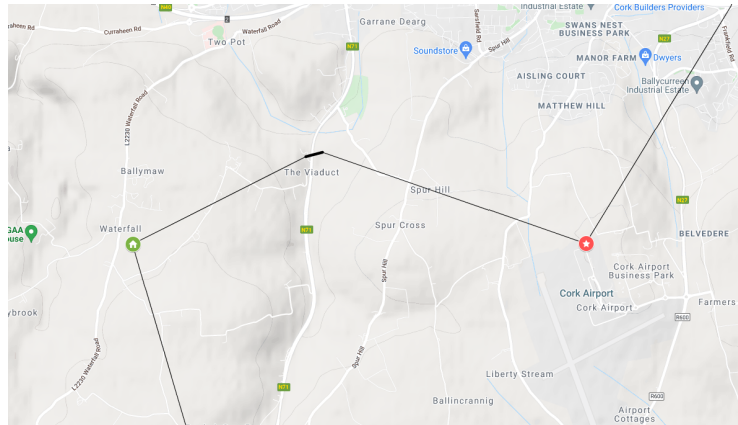
Significant sections of this rail see no change - the settlements serve tend to be larger in size than elsewhere, so are primarily located in the 'major settlements category'. There only two additional towns along the C Lines, Riverstick and Belgooly, which receive service. In this, it is clear that most of the function of this line will be in connecting major settlements along the western side of Cork Harbour to Kinsale. The areas of this that fall within the Cork Metropolitan Area will not be discussed here.

Additional geographic factors complicate the matter of Kinsale. There are effectively two choices for rail connectivity to Kinsale; either extending the line from Carrigaline to Kinsale, and serving additional communities along the way (despite additional geographic challenges), or extending the line from the Cork-Bandon branch as a spur, and facing fewer geographic challenges, though not serving any intermediate communities. During Alignment O, it was closer to the Cork-Carrigaline corridor than elements of Line B, hence the reason for the initial joining to Line C.. The role of Kinsale will be addressed later in section 5E and in discussions of later alignments.





The route connecting to the airport alters from the one discussed in Section 5B. It may make sense to utilize the Viaduct for crossing the N71 at this point, before veering slightly south to serve Cork Airport and the Cork Airport Business Park at a northerly site, before continuing into the city in parallel to the N27.



Potential link to Cork Airport

**D. City-Running Alignments**

While we have outlined the benefits that West Cork Rail and its associated infrastructure will bring, we do not wish to dwell for too long on the exact alignment which this would take in the city center, as it is more subject to change than the more statistical approach with which we have taken to our analysis of West Cork. This also links to Section 4F, in which we discussed the varying options for connection to the national network (several of which do not envision a connection through the city itself). However, keeping in mind the principles of motorway mirroring, we nonetheless offer a brief explainer as to one way through which how the West Cork corridors can connect with the rest of the rail network.

- Line A along the N22/N40, before joining to the city along the N27. This alignment allows for provision of service to areas such as Bishopstown, Ballincollig, Wilton, Togher, and Douglas. A similar route for Line B, except joining from the Airport route at the N27 the entire way.
- Line C either along the N40 alignment from south Mahon, or (if a tram-train alignment allows) sharing track with the planned Cork light rail alignment through the Passage Railway Greenway to the city, continuing on the eventual alignment in the Docklands that this light rail corridor will. This alignment duplicates service along sections, though potentially allows for additional service in Rochestown, and direct/express service from Mahon, Blackrock, and the Docklands development.

**E. Alignment Conclusions and Trade-Offs**

**i. Kinsale**

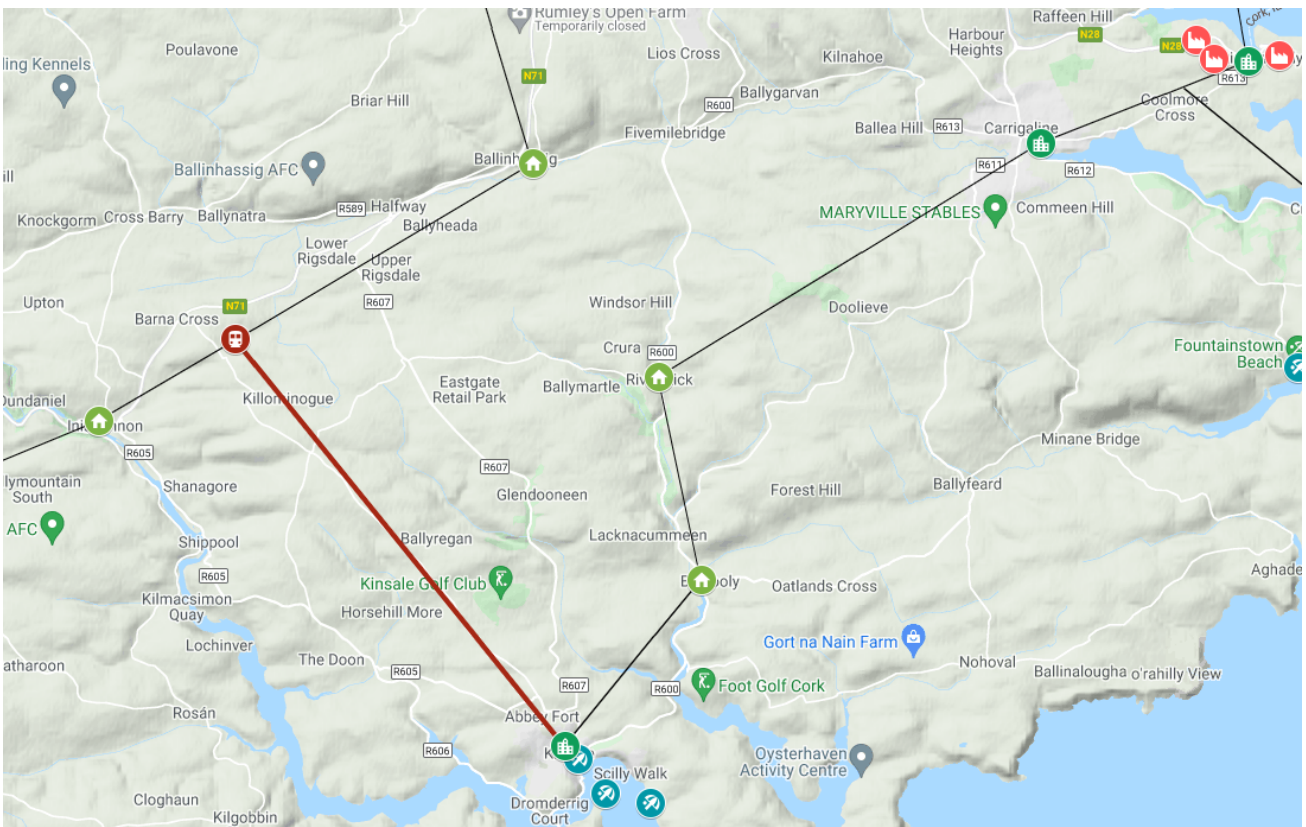
There are effectively two choices for Kinsale's connection via rail. The first is location on its historical rail corridor, in the form of a spur from the Cork-Bantry route. The second is a new location on an extension of the Cork-Carrigaline corridor.

Option 1 means an easier geographic connection, but serves little in the way of other amenities or towns. It also introduces a branch to Line B, resulting in service splits. This also

alters the nature of Line C, which becomes substantially shorter, serving only as far as Crosshaven. It also removes the need for a spur to Crosshaven on Line C, as the line can now route around Carrigaline to Crosshaven as its terminus, similar to the historical Crosshaven Railway.

Option 2 connects Kinsale to more amenities along its route. By extending this corridor, the route can also serve the towns of Riverstick and Belgooly. Both of these are classed as 'minor settlements'. This also eliminates the need for a spur off the Cork-Bandon route, which would reduce the frequencies of service to both Kinsale and the remainder of the West Cork route.

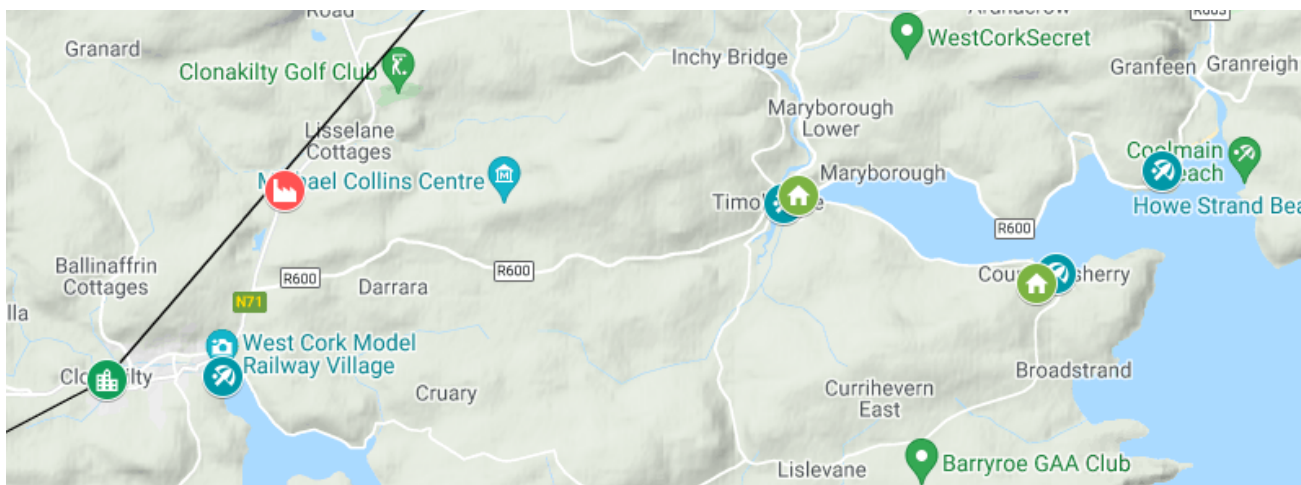
Ultimately, closer examination of geographic and engineering realities may make this decision, as well as an eventual cost-benefit or other form of social analysis.



*The line in red presents an alternate option to connect Kinsale*

**ii. Timoleague and Courtmacsherry**

Both of these settlements are 'minor towns' according to the above criteria, and unfortunately were located too far from the Bandon-Clonakilty trunk to deviate the rail to provide service to these towns. It is possible that, in lieu of a spur, the connection takes the form of a 10km long shuttle service between these two towns to an intermediate infill station along the Clonakilty-Bandon segment of this line. This element may be one of the first sections of track considered for potential expansion of the line at a later date.



*Timoleague and Courtmacsherry in relation to the Bandon-Clonakilty route*

**iii. Macroom-Killarney**

It may be possible to extend this line along the N22 alignment, providing a connection to Baile Bhuirne, the only other notable settlement along this corridor. The tender for this connection was originally part of the Macroom Direct Railway, though never materialized.

**iv. Schull and Baltimore**

Similar to Timoleague and Courtmacsherry, these towns were both located off the main trunk of the Cork-Bantry line. Both towns are located on separate peninsulae, and were connected by shuttle light rail services

## 6. END RECOMMENDATIONS & CONCLUSION

### A. End recommendations

While the goal of this paper has been to analyze in as much detail as possible issues around the return of rail to West Cork, there are some major takeaways with regards to best practice. The use of railway bridges along motorway sections may present itself as the most pragmatic approach to connecting the city, given the need for less eminent domain, avoiding need for much intense dispute with residents, while also providing maximum connectivity to city residents. This also presents solid options when approaching topographical ease of construction. Providing some connections during urban running parts of the system has benefits in terms of increasing passenger numbers and overall system benefit, though must ensure this does not take precedence over the original aims of connecting West Cork. The tram-train concept may reduce costs and logistical issues within the plan, and present a non-traditional but equally effective way to ensure greater rail connectivity to rural areas. Despite this, it does come with some trade-offs around connectivity to the greater network, and is less suited to freight rail.

Naturally, this report is not an exhaustive examination, and uses of other technologies, approaches, and methods may also prove beneficial in ensuring the return of rail to West Cork.

### B. Conclusion

It is clear that rail has numerous social, economic, and environmental benefits for West Cork, and that the All Island Strategic Rail Review needs to discuss 'how' and not 'if' rail corridors can be constructed in the most efficient and beneficial fashion. The removal of rail from West Cork is one of the long lamented planning decisions of the post-independence decades, and has had sizable knock-on effects in how West Corkonians live, work, and travel. The All Island Strategic Rail Review has the once-in-a-generation opportunity to restore this lost connectivity to an area that has been deprived of it for so long. In this report, we have provided in-depth analysis on the various benefits, challenges, and opportunities that rail in West Cork can bring, and how any such restoration should be best approached. The successful return of rail to the towns and villages of West Cork will be an enormously impactful planning decision, and will have the potential to transform much of the region, providing efficient, reliable mass transport to tens of thousands of people.

The Cork Commuter Coalition can be contacted for additional comment, questions, or queries at [corkcommuter@gmail.com](mailto:corkcommuter@gmail.com), or on Twitter at [@corkcommuter](https://twitter.com/corkcommuter).



*Coming soon to West Cork.*

*Report prepared by Ciarán Meers, Chairperson of the Cork Commuter Coalition. Special thanks to Katie Kiely, West Cork Officer of the Cork Commuter Coalition, and Maebh McCarthy, Ex-Officio of the UCC Government and Politics Society, for additional work provided.*