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Civil - Structural - Transportation - Environmental

Dublin Mountains Visitor Centre

Potential Cable Car Access Outline Report

This outline technical note provides some outline information about cable car systems to inform South Dublin County Council about the typical scale of costs that could be involved if a cable car were proposed for access from Tallaght to the *Hell Fire Club* on Montpellier Hill in the Dublin Mountains.

Cable Car System

Cable car systems may consist of the following types:

- Telépherique: Two large cars operating in tandem on a variable frequency basis to suit demand. There is one example of this in Ireland that provides access to Dursey Island in County Cork. This system is usually best suited to long spans between widely spaced pylons across a deep valley or a very steep mountain climb over a relatively short horizontal distance. Due to the fairly heavy cars that carry 50 or more passengers at a time, the cables and pylons are more substantial and costly than a gondola system. Such a system would be poorly suited to the fairly low gradient route in the Dublin Mountains.
- Telécabine / Gondola: A chain of small cabins that may carry between 6 and 12 passengers each operating on a continuous loop basis. These usually have frequent small pylons and follow the ground profile at modest elevation. They are very widely used in ski resorts for a high-frequency and high-capacity service. This system would be best suited to the terrain in the Dublin Mountains.

Examples

Below is an image from Bad Hofgastein in Austria for a new high-capacity gondola (multi-cabin system) that is under construction.



Proposed Gondola Cable Car at Schlossalm, Bad Hofgastein, Austria

Details of the proposed new gondola in Bad Hofgastein are as follows:

- 3km long;
- 1200m rise;
- 10 minutes travel time;
- 3,000 passengers per hour capacity;
- €84m development cost, excluding land.

The standard ticket price for the Austrian ski lifts across the very extensive *Ski Amadé* region is €24 for a pedestrian return trip to any summit.

Grouse Mountain Cable Car, Vancouver, Canada



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The Grouse Mountain Cable Car, Vancouver, Canada is located at the northern edge of the city and climbs 800m over a distance of 1.4km. It serves a ski area in winter and is popular with hikers in summer. Return trip tickets on this cable car cost C\$45 (€32) per adult.

Montjuic Cable Car, Barcelona, Spain



Montjuic Cable Car, Barcelona, Spain

The *Montjuic Cable Car* in Barcelona climbs a small mountain at the southern edge of the city centre, overlooking the port and was constructed in 1970. It climbs 85m over a distance of 0.75km. Return trip tickets cost €11.25 per adult.

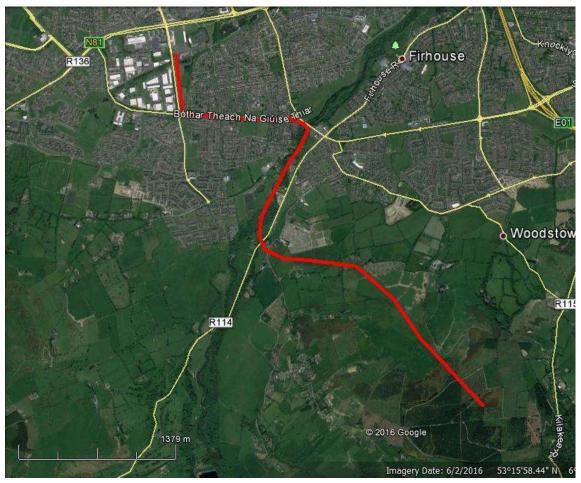
Dursey Island Cable Car, Beara Peninsula, Co. Cork, Ireland



Dursey Island Cable Car, Co. Cork (antiquated and sub-standard): 400m long.

Potential Cable Car Route to Hell Fire Club

As the crow flies the direct distance from Tallaght Stadium to the summit of Montpellier Hill in the Dublin Mountains is 4.5km, and the climb is 300m. However, it would not be acceptable in terms of either health & safety or for residential amenity, for a cable car to traverse above buildings, especially houses. A 6km long indirect route would therefore be required as shown on the following aerial photograph. This route would follow green open spaces alongside public roads at Whitestown Way and Firhouse Road West to Oldbawn. It would then turn south along the River Dodder valley for 1km before turning eastward at Bohernabreena to pass south of the cemetery crossing farmland and forestry on the lower mountain slopes.



Potential Route for Cable Car from Tallaght to the Hell Fire Club on Montpellier Hill

Likely Costs for Hell Fire Cable Car

Due to the unusual factors involved, of longer than usual length and likely low passenger volumes, it is difficult to make comparisons between the situation for the possible *Hell Fire Club Cable Car* and other cases, but the potential investment cost involved would probably be in the region of €50m +.

Operating costs are not known, but would be significant and in excess of €200,000 per annum.

On the basis of projected total visitor numbers to the proposed Dublin Mountains Visitor Centre of 300,000 per annum, and if 10% of those used the cable car, the potential passenger demand would be 30,000 per annum = 100 per day average, possibly 500 per day at peak, or 10 to 50 per hour each way over a 10 hour day. At a return fare of €25 each, this would generate revenue of €750,000 per annum, possibly equivalent to 1.5% of an investment cost of €50m, and without taking account of the operating costs.