

Stage 5: Prioritising Improvements

Method

All schemes in the following table are on local authority highway land, with the exception of the Dump Path, Rocky Hill, the footpath from Old Town to the airport, the unsurfaced section of McFarland's Down at Telegraph, and the coastal path between Porthmellon and Porthloo, which are mainly on Duchy-owned land. All schemes on Duchy land are subject to the landowner's agreement. Figure 2 and the first drawing in Appendix 1 show the extent of Highway Land and affected private roads, tracks and paths.

Schemes should be designed sensitively given the AONB and special character of the islands.

Prioritisation is based, simply, on the need to bring materials and machines to the islands just once due to the high cost of repeated visits. Priority A represents the first tranche of the overall single scheme; and Priority B represents the second tranche of work delivered at the same time, but subject to the amount of funding awarded. Priority C schemes are those that are not reliant upon the delivery of aggregates and machinery and can be implemented when funds allow.

However, given limited funding, we have included infrastructure on 'core routes' to school (mainly within Hugh Town and Old Town) as a higher priority. These are shown as **bold reference numbers** in the tables.

An additional level of higher priority for walking schemes may be used to justify expenditure on walking within the Core Walking Zones (CWZs)

and associated 'funnel routes' shown in Figure 8. However, this would exclude almost all walking schemes in rural areas where, arguably, higher vehicle speeds make safer walking environments more urgent. On this basis, CWZs and their 'funnel' routes are not used in the prioritisation although they may be used as additional justification.

Approximate measurements have been obtained using Google Satellite imagery and are assumed to have an accuracy of within five metres.

Costs for footway and cycleway construction are assumed to be 'per direction'. Where there are footways on both sides of the road the cost estimate has taken this into account only if the proposal covers both sides.

Assumptions for construction costs are as follows:

- Footway construction: kerbs, 1.8m width (including some new 'behind hedges / walls' paths).
- Cycleway construction (off-road, two-way): no kerbs; 2.5m width
- Carriageway construction: sub-base, compaction, concrete or asphalt surface, 5.0m width.
- Within Hugh Town an uplift has been included for higher quality public realm treatments, nominally adding a third to the total cost. This applies to sections HT-01, HT-02, HT-03.



Footways across the island are generally in a poor state of repair.

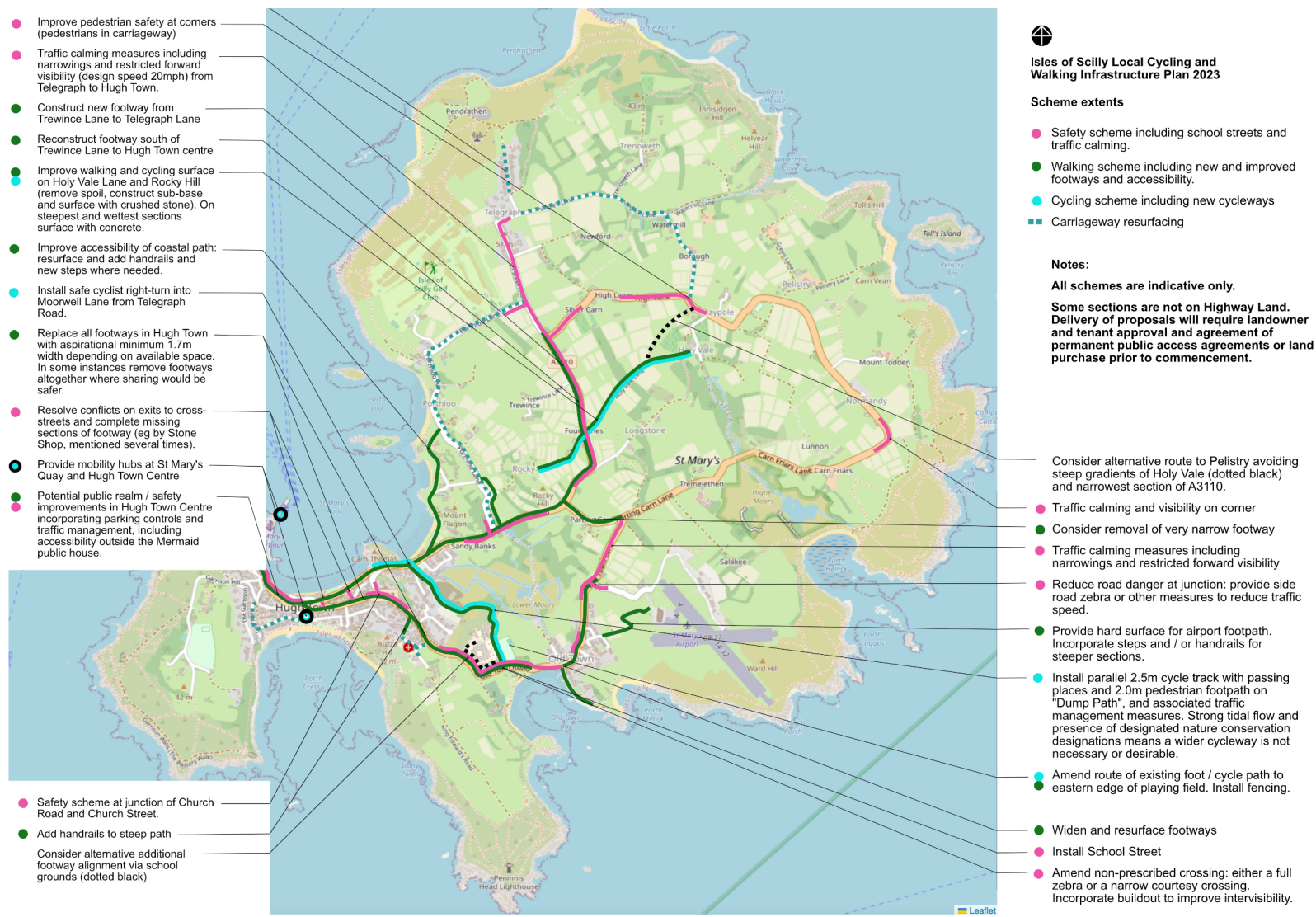
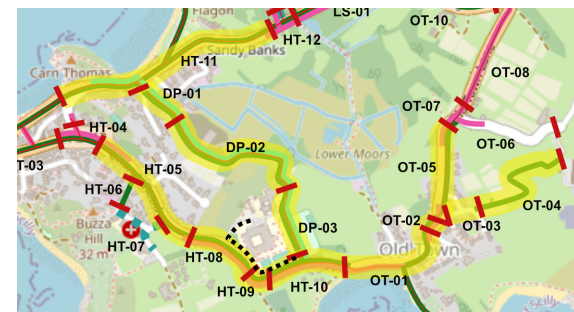


Figure 11: Cycling and walking scheme extents St Mary's Island

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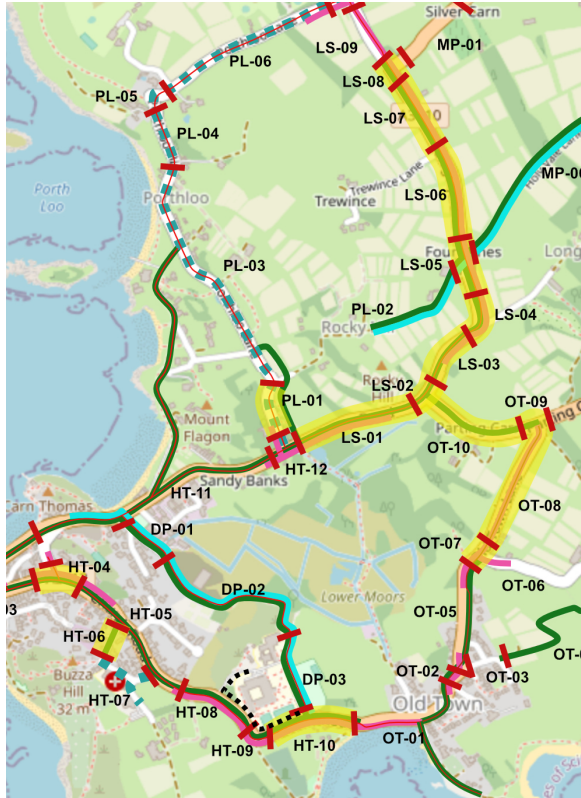
| Ref Modes | | Description | Length (m approx) or count | Cost £ |
|---|---|---|----------------------------|---------|
| DP-01 HT-11 C,W | A | <p>"Dump path" Moor Well Lane section (highway land): design-speed restriction to 10mph for motorised vehicles. Added priority due to this being a core route to school.</p> <p>Consider light measures including right turn cycle logos, arrows, and 'primary position' strip of skid-resistant surfacing in primary position on Telegraph Road eastbound to highlight cyclists' right turn movement towards 'Dump Path'.</p> | 150m | 10,000 |
| DP-02 DP-03 C,W | A | <p>"Dump path": re-provision of uneven path. Excavate existing path, level and re-lay in concrete to 2m width and / or consider boardways. Added priority due to this being a core route to school. Note: part-owned by Duchy. Costs based on £304 per metre for 2 metre footway.</p> | 604m | 183,600 |
| DP-02 DP-03 C,W | A | <p>"Dump path": provision of new, two-way segregated cycle track to 2.5m width with passing places for larger cycles. Level ground and lay concrete path or boardway. Note: part-owned by Duchy of Cornwall. Costs based on £426 per metre cycleway construction.</p> | 604m | 256,700 |
| HT-05 HT-08 HT-09 HT-10 HT-11 HT-12 OT-01 OT-02 OT-05 W | A | <p>Footway replacement including widening to aspirational 1.8m and kerb replacement. Install continuous footway at junctions, including give way lines set to rear of footways. Added priority due to these footways being core routes to school.</p> <p>Mix of footways on one side or both sides of the roads as required, particularly on the insides of 'left-hand' bends where there is currently conflict due to pedestrians walking (correctly) on the right-hand side in the opposite direction. Costs based on £304 per metre footway replacement.</p> <p>HT-08, HT-10 consider new footway behind hedge and wall on school side if space is available (third party land).</p> <p>Incorporate measures to prevent footway driving where necessary.</p> | 1172m | 356,290 |



Scheme extents - yellow highlighting.



DP-02 -DP-03 Replace Dump path with separate walking and cycling paths.



Scheme extents - yellow highlighting.

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| Ref / modes | Description | Length (m approx) or count | Cost £ |
|--|--|----------------------------|---------|
| HT-06 W | A Church Road to Hospital: Provide handrails to assist hill climb on foot. It is not possible to install resting platforms. | 2 count | 5,000 |
| HT-04 C,W | A Safety scheme at junction of Church Street and Church Road by the boarding house. Change junction priorities; construct built-out footway by boarding house. Based on £30,000 per raised crossing. | 1 count | 50,000 |
| OT-07 OT-10 PL-01 LS-01 LS-02 LS-03 LS-04 LS-05 LS-06 LS-07 LS-08 W | A Footway improvement including widening and kerb replacement, rural areas and small settlements. Install continuous footway at junctions. Mostly on one side of the road. Incorporate measures to prevent footway driving where necessary, and use footways as part of traffic calming. Consider removal of footway where it is not possible to widen; use a white line painted 2m into the carriageway instead and possibly some intermittent vertical deflection to discourage drivers from continuing within the delineated 'footway' area. Based on £304 per metre, reconstruction. | 1390m | 422,560 |
| HT-10 W | A School crossing, Old Town - Options: <ul style="list-style-type: none">Full zebra (belisha beacons and markings); orBuild out on northern side to create a pinch point and improve visibility for and of pedestrians. Raised courtesy crossing. | 1 count | 60,000 |

| Ref / modes | | Description | Length (m approx) or count | Cost £ |
|--|---|--|----------------------------|---------|
| DP-01 HT-09 HT-10 OT-01 (part) C,W | A | School street: Vehicle access or other restrictions during school travel times. Costs: school street measures (moveable barriers / temporary signs and publicity). | N/A | 20,000 |
| HT-01 HT-02 HT-03 W | A | Footway widening and parking prevention Hugh Street, especially outside Co-Op. Include passing places. Footway replacement and widening on Church Street and Lower Strand, public realm improvements throughout town centre core walking zone. Accessibility improvements by Mermaid public house while retaining visible heritage cobbles (HT-01). Keep kerbs low, recognising informal pedestrianisation. Use granite and wooden bollards to prevent parking. Costs indicated – “footway reconstruction” on north side with minor improvements and public realm on southern side. Based on £304 per metre for a new 2m footway. | 2190m | 665,760 |
| PL-01 PL-03 PL-04 PL-06 TL-03 TL-04 TL-07 C,W TL-06 C,W | A | Carriageway resurfacing (sections missed in 2014) to provide safe surface for walking, wheeling and cycling. Based on £75 per metre (£25 per square metre). | 2507m | 188,025 |
| | A | Carriageway construction (new street). Based on £900 per metre (£300 per square metre) | 177m | 159,300 |



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| Ref / modes | Description | Length (m approx) or count | Cost £ |
|--|---|----------------------------|---------|
| HT-11 HT-12 LS-01 LS-02 LS-03 LS-04 LS-05 LS-06 LS-07 LS-08 LS-09 TL-01 TL-02 TL-03 PL-06 MP-01 MP-04 PL-03 PL-04 PL-05 PL-06 PY-05 OT-08 OT-09 OT-10 C,W | A Local safety schemes including traffic calming measures to enable safe walking (speed reduction). These measures respond to stakeholder responses and police comments about high approach speeds. The following measures are indicative only: Measures on corners including chicanes on 'outside' approaches, changed priorities at junctions, and tightening on 'inside' of curves Visual narrowing and forward view restrictions on straight sections. Removal of some parking on Telegraph Road at Porthmellon near the industrial estate, to improve sight lines. Wider footways to increase narrowing effect. Inclusion of passing sections Changed priorities and improved visibility at some junctions, especially HT-12 and LS-05. Costings: assume £30k per measure x estimated number of interventions. Consider removal of footway where it is not possible to widen; use a white line painted 2m into the carriageway instead and possibly some intermittent vertical deflection to discourage drivers from continuing within the delineated 'footway' area. | 20 Count (approx) | 600,000 |

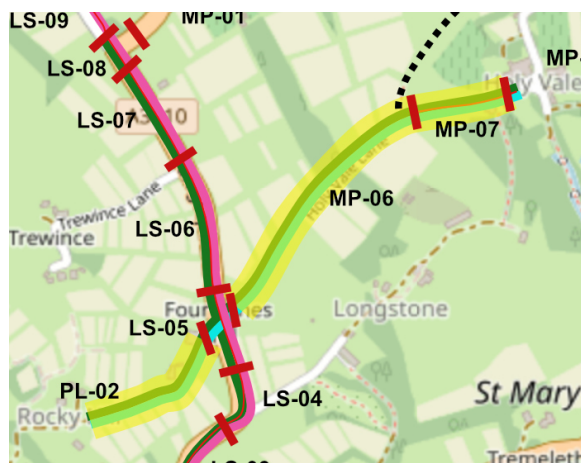
| Ref / modes | | Description | Length (m approx) or count | Cost £ |
|---------------------------------------|---|---|----------------------------|---------|
| Urban Duchy C | A | Weatherproof (salt-proof) cycle storage lockers on St Mary's Quay (2), Bryher Quay (1), Tresco Quays (2), St Agnes, (1) and St Martin's Quays (2) Cost assumes £10k per facility with a fee payable by users for maintenance. Number in brackets indicates how many quays. | 8 count | 80,000 |
| Rural W | A | Junction tightening, visibility improvements ('Fail' junctions) Costings: assume £10k per junction | 4 count | 80,000 |
| Urban W | A | Continuous footway and / or junction tightening ('poor' junctions) Costings: assume £20k per junction | 8 count | 160,000 |
| Rural | A | Junction tightening, visibility improvements ('poor' junctions) Costings: assume £5k per junction | 4 count | 80,000 |
| CP-01 CP-02 CP-03 CP-04 W | B | Coast path hard surfacing Porthmellon Beach to Porthloo (Duchy land) - reasonable adjustments: CP-01: remove existing mix of sand and stones and replace with either: a concrete surface; or water permeable surface such as Flexipave; or a 'cellular mat' which contains the sand in 'cells' leaving a surface that can be used by wheelchairs. CP-02: Install handrail on steeper sections. CP-03: Track construction for access to properties and footpath (concrete, flexipave, or cellular mat). CP-04: Install new steps and handrail at steep slope. A wheelchair ramp is unlikely to be feasible due to the lack of available space. | Various | 100,000 |



Scheme extents - yellow highlighting (not including island-wide schemes and cycle storage locations indicated in table).



CP-01-04 Coast path: reasonable adjustments / provide accessible surface.



Scheme extents - yellow highlighting (not including island-wide speed limits indicated in table).



MP-07: Excavate and surface in hard material eg concrete.

| Ref / modes | Description | Length (m approx) or count | Cost £ |
|----------------------------|---|----------------------------|---------|
| MP-07 C,W | B Walking link to Holy Vale: Dig out steep section and provide hard surface and drainage, having regard to visual appearance. Costs based on light traffic footway construction at £600 per metre (2x standard footway width). [Consider additional, less steep route avoiding Holy Vale to north, connecting with Maypole at Watermill junction. This would also enable pedestrians to avoid the narrow section of High Lane – subject to approval from Duchy and / or tenants.] | 120m | 72,000 |
| PL-02 (part) MP-06 W | B Walking link to Holy Vale (Duchy land): dig out, crush and reinstate existing materials mixed with additional aggregate and mortar. Cheaper construction - we have assumed equivalent to £304 'footway' construction per metre. | 758m | 230,432 |
| General C,W | A Introduce 20mph speed limit for Hugh Town, Porthloo and Telegraph, with all island roads upgraded to a design speed of 30mph*. | Nominal for signs and TRO | 2,000 |
| | Total cost of priority A schemes £m | | £3.6m |
| | Total cost of priority B schemes £m | | £0.5m |

Estimated costs are based on AMAT assumptions projected to 2024 (worst case) scenario - source: Active Travel England / DfT 2022. Carriageway resurfacing and reconstruction cost estimates based on Kent County Council Asset Management Plan with a 20% uplift to provide a reasonable estimation.

Indicative costings above do not include cargo ship transport. We advise allowing for a doubling of each estimate for the heaviest materials.

*The highway design speed will generally be 20mph within both the 20mph and 30mph speed limit areas. Sections to be prioritised will be those where speeds exceed 20mph.

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Off-Islands

The Isles of Scilly are an archipelago of five inhabited islands. The main island is St Mary's, which has its own local highway authority and road network.

Four 'off-islands' of St Agnes, Bryher, St Martin's and Tresco are owned by the Duchy of Cornwall and extensively managed by tenant farmers and the Wildlife Trust. The Duchy builds and maintains their respective roadway networks.

Their resident populations are very small: the 2011 Census for St Agnes, for example, records just 85 persons. However, all of the islands are very popular with visitors whose spending power helps maintain their local economies.

There is permissive access across much of the tenanted land, in particular the coastal fringes which are managed by the Isles of Scilly Wildlife Trust using informal footpaths and other tracks including the coastal paths.

Concrete roads have been constructed from end to end on each of the off-islands, with loops and spurs connecting the spine roads with various destinations.

Tresco has by far the largest network of concrete roads, all of which appear to be in reasonable state of repair. Roadways on the other off-islands are a variable condition: On St Agnes, a relatively new roadway connects the ferry terminal with the community hub but the remainder is in a poor state of repair. On the other islands, concrete roads are in variable condition throughout, and some sections have been resurfaced with an additional thin layer of concrete.



Typical off-island concrete road

Complementary measures

The Isles of Scilly already has impressive levels of walking and cycling. 67% of people told us they walk and 27% said they cycle every day. A further 11% and 14% respectively said they walk or cycle at least five times per week. However there is also a significant amount of car use, with 14% saying they drive daily and a further 9% saying they drive five times a week.

The Corporate Plan sets a target of reducing the number of registered motorised vehicles on the island by 5%, from the 2020 baseline of 874, a reduction of 44 vehicles.

Complementary measures take the form of behaviour change initiatives and physical interventions such as cycle parking that promote the investment in infrastructure and provide security for cycles at each end of the trip.

Behaviour change

Behaviour change is complex and requires considerable expertise and knowledge of psychological triggers to be effective at achieving modal shift. Examples of effective schemes include:

- Gamification of walking, such as online 'Pokemon' trails and issuing step counters so people are encouraged to complete "10,000 steps" per day.

- Active travel breakfasts - an opportunity to meet other pedestrians, wheelchair users and cyclists and also an opportunity to seek engagement on LCWIP schemes coming forward. This could combine other initiatives including try-out bikes, Dr. Bike, giving out cycle route maps and providing basic cycle training advice (with the opportunity to take up formal lessons).
- Cyclist-training, teaching people how to cycle and then how to cycle effectively in environments with other traffic including pedestrians and drivers.
- Dr. Bike - basic maintenance and repairs carried out free of charge, with additional value if skills such as puncture repair can be taught to cyclists.
- Reward schemes and competitions, charity walks / wheels and bike rides and other 'community-together' schemes that make active travel feel like a community effort.
- Sustrans' Bikelt scheme, Cycling UK's Great Bike Revival and Living Streets' Walk on Wednesdays are examples of long-running behaviour change initiatives that are monitored to show what measures are most effective.

Physical complementary measures

Physical complementary measures provide the small essential features that make the major infrastructure work. Examples include:

- Providing seating for pedestrians at regular intervals to assist people who are less able to walk longer distances without a rest.
- Mobility scooter and wheelchair hire, and accessible golf buggies to enable everyone to get out and about across the island.
- Provision of on-street cycle parking and seawater-proof cycle storage lockers.
- Provision of cycle hire services to include e-cargo-bikes available via an app - mainly for businesses to deliver to residents across the islands rather than using vans.

Funding for complementary measures and behaviour change will be applied for either separately or as part of individual Active Travel Fund bids.