

## Mapping Infrastructure Mapping

What to Map?	How it supports planning	How it supports investment and funding?	Information available and mapped (Y/N)
Backhaul networks (optical fibre-, points of presence (PoPs))	Establishes available capacity and the costs of deployment or extension.	Indication of supply requirements and related costs.	
	It also helps to identify the options for backhaul: microwave, cellular, satellite - this is informed by demand and affordability.		
Mobile network coverage and base transceiver stations (BTS) locations	Provides an indication of which MNOs and ISPs are in the area, whether coverage needs to be rolled out or extended and this in turn can impact business model and costs.	Business model will be based on this key input.	
Locations of electricity infrastructure that is key for broadband infrastructure	Enables school prioritization and network planning based on electricity grid capacity.	In some cases the infrastructure may be capable of being shared in order to reduce costs and speed up rollout - absence of electricity is a key stumbling block for rollout and significantly increases cost.	
Locations of locally/community-owned water towers, silos, telecommunication towers, high sites and tall buildings	Enables school prioritization and network planning.	Can be used by broadband providers through low- or no-cost leases.	
Rights of way	Enables school prioritization and network planning.	Enables easier and less expensive access for the deployment of fibre-optic cable.	
Roads	Enables school prioritization and network planning.	Enables easier and less expensive access for the deployment of infrastructure.	





Topography	Enables school prioritization and network planning.	Enables easier and less expensive access for the deployment of infrastructure.	
Capital projects, either current or planned, such as road construction or installation/upgrading of water pipes or other infrastructure	Enables identification of potential partners and funders.	Can be used as an opportunity to lay new fibre-optic conduits for future activation.	
Details of community- owned land	Enables prioritization, identification of potential partners.	Land can possibly be leased at reduced costs.	

## Socio-economic data (to assess demand, affordability) and assuming school as an anchor tenant

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Population (total and student)	Enables the scoping of the project and definition of project requirements.	Indication of demand. School as an anchor tenant.	
Per capita income	Facilitates and understanding of affordability.	Informs the funding strategy and subsidisation model.	
School budgets	Facilitates and understanding of affordability.	Informs the funding strategy and subsidisation model.	
Potential other anchor tenants	Identifies neighbouring schools, libraries, etc that might increase demand and income/expenditure. Enables school prioritization and network planning.	Facilitates demand aggregation.	
Funders and Donors	Enables identification of potential partners and funders in a given area/ for a specific usage.	Promotes an understanding of the estimated subsidies and funding available.	

