



The StreetSmart Pre-Assigned FDH

No two fiber deployment are the same. Every fiber deployment has its own unique requirements. With that in mind, network planners and designers have the difficult task of balancing upfront capital expenditures (CAPEX) against future operational expenditures (OPEX). One component of the design/build is sizing and placement of the fiber distribution hubs (FDH). Decisions must be made on how many ports are going to be needed and how many splitters need to be included in the initial deployment to satisfy near term customer take rates.

THE BALANCING ACT

Predicting how many initial customers can sometimes be difficult and network planners do their best to contain initial costing and minimize stranding ports or fibers. However, sometimes planners have a high confidence that the fiber service take rate in a particular FDH will be high initially or in the near future. In this instance, the FDH's fiber tail is spliced and a technician is needed to fill (or nearly fill) all splitter locations and run each splitter leg to the proper distribution port. Properly cleaning, scoping and routing both the feeder legs and the distribution legs can be a time consuming and costly step even when it is known the cabinet will be almost fully utilized.

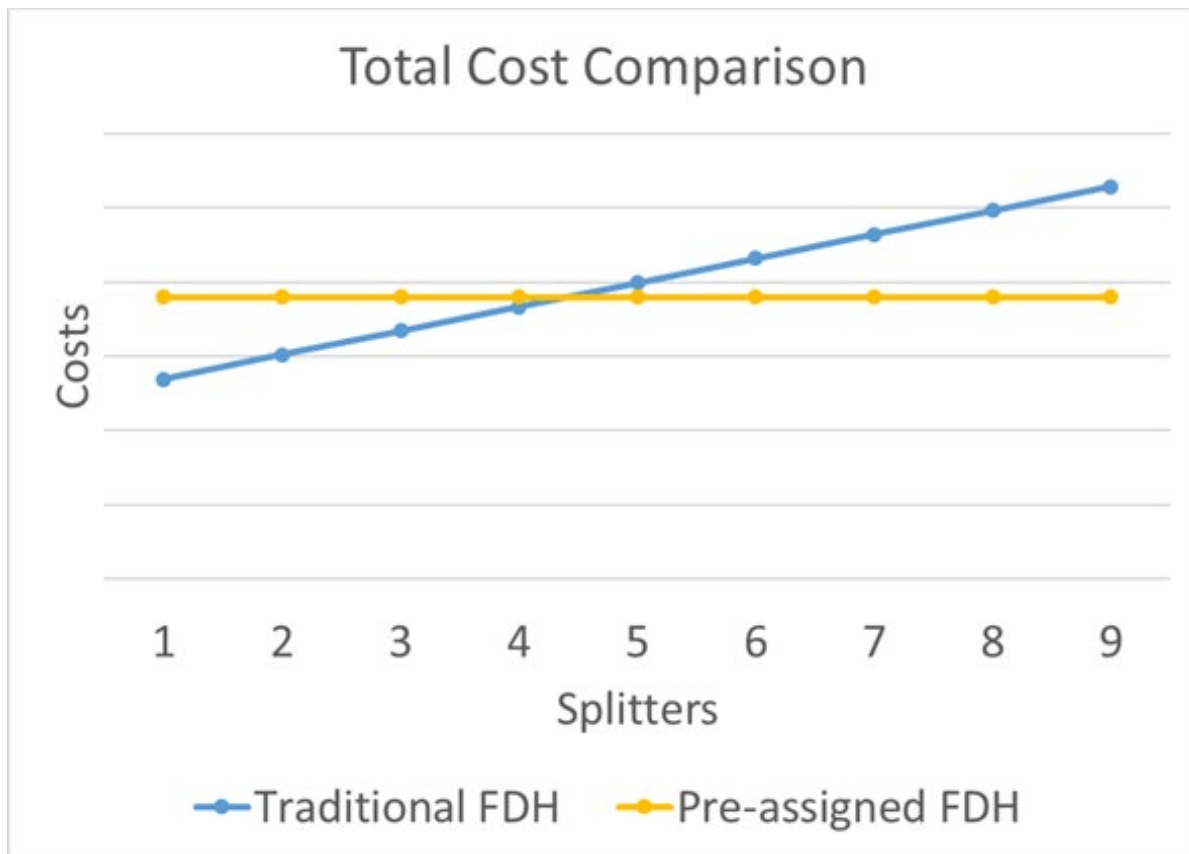
MINIMIZING COSTS

One way to minimize costs when a high take rate is expected is to have the FDH fully pre- assigned. What does this mean? A pre-assigned FDH is just that; all splitters are pre-installed, and all feeder and distribution legs are routed, cleaned, tested and assigned to the proper location prior to delivery of the FDH to the installation technicians. The only work operation needed to fully turn up the cabinet is splicing of the tail into the trunk fiber.

WHO CAN BENEFIT?

Anyone planning a greenfield fiber deployment and/or anticipate a high up-front take rate can reduce OPEX costs significantly using this deployment model. This includes Telco's, Cable TV providers, municipalities and even power utility districts (PUD). For example: Power utilities that "own" the customer, meaning they already have accounts set up in a particular region with services to every home in that region could reasonably assume that providing broadband services as an additional benefit to their customers would garner a substantial take rate. In this example, they could reduce the OPEX cost of rolling a truck each time they added a customer.

Assuming the average cost of a truck roll in most broadband systems is approximately \$100/hr. and that the cost of the 32 way splitter has already been accounted for in the original CAPEX, a truck roll would still be required to route, clean and inspect each splitter leg. Potentially adding 32 truck rolls at a minimum of 1 hour per dispatch. Using this scenario, the overall OPEX could result in a truck roll for 9 splitters multiplied by 32 legs each and again multiplied by \$100 per leg. That would result in a substantial cost model. While it would be reasonable to assume that at least some of the splitter legs would be routed and assigned at the initial installation, one could argue that only 7 of the available 9 splitters would be assigned after the fact and the time associated would be 30 minutes per truck roll instead of an hour each. That still results in additional OPEX costs to utilize the entire capacity of the FDH.



For Illustrative Purposes Only

Using the same model with a StreetSmart Pre-Assigned FDH, the additional OPEX drops to zero with an added cost savings resulting from no splitters needing to be placed during the initial cabinet installation.

IN SUMMARY

The StreetSmart Pre-Assigned FDH stems from our field proven experience working with fiber deployments. This latest FDH design is a viable option to consider in your network deployment...

IF Network Designers:

- Anticipate a high take rate
- Are designing a greenfield deployment
- “Own” the customer (such as PUD, Municipality)
- Desire minimal craft interaction

Contact your Clearfield representative to learn more.

* Also see detailed product information on our website at <https://www.seeclearfield.com/fiber-optic-distribution-cabinets/passive-cabinets/streetsmart-preassigned-fdh-cabinet.html>