

## Agenda Item VI.C

### Improved Deployment Economic Considerations

The Council's focus on the question of affordability is a key indicator that the Council has recognized the importance of economic considerations in any discussion related to improving telecommunications services. There are two views of how economic considerations play a role. One is from the view of the provider, who must calculate the cost of providing services. The second view is from that of the consumer, who must calculate whether any service that is offered is worth purchasing, is "affordable."

One means of making sure that a service is affordable is for subsidization of the cost of the service. From the perspective of the categories offered here, subsidization would be a governmental service, or would fall within the governmental category. The discussion here attempts to focus just on the unregulated economic factors.

Because the service provider's perspective ultimately drives the consumer's perspective on how affordable a service is, this discussion can start with the providers perspective. The most commonly discussed factors in reviewing the economic viability of a deployment investment are:

- The overall rate of return on an investment,
- The expected time between an investment and the start of some return on investment,
- The expected time until complete recovery of the investment (similar to rate of return), and
- The risk of the investment.

The risk factor can cover several matters. The question of take rates, how quickly consumers begin to use a service once it is offered is one aspect of the risk. Another aspect of risk is the question of the density of consumers. Often measured in the number of homes or businesses per mile, this factor, when combined with the take rate, begins to touch on the important question how likely an investment is to ever show a return.

These basic rules of economics have an effect on telecommunications deployment. Telecommunications systems have the characteristic of being capital intensive, especially at the start of the deployment schedule. In operation the system is less capital intensive, especially as automation plays an important role. This makes it hard for a telecommunications project to bootstrap its way to success. That is, most telecom projects cannot make a small initial investment and then use the operating revenue to build later. To even begin requires a large investment.

The relevance of economic factors affects the other categories discussed today. The dispute over collocation is an example. For technical and economic reasons, the only practical way for some new service providers to deploy their system is to locate within the existing LEC's facilities, and use some of the incumbent's facilities to lower the cost

of getting to customers. From the perspective of the incumbent, forcing such an intrusion reduces the chance for the incumbent to generate a return on the initial investment of setting the system up. For the competitor, there is no other way to get access to customers.

One important factor that the Council has recognized is that there is an economic basis for the digital divide. The decreased density of rural areas means a higher capital investment to serve fewer potential customers. In any market, the cost of providing service, especially the cost to competitors seeking to use some existing infrastructure, dictates that the competitors will choose to serve the larger customers who can justify the investment and will pay for more expensive services. This leads to the phenomenon of "cherry picking" and "residential redlining."

In reviewing proposals for Council action, the Council should give consideration to the economic factors that will affect the success of any proposal. Suggested evaluation criteria might include:

- Is the proposal economically viable? Does the proposal suggest transferring choices among the relevant economic criteria in a way that affects the Council's desired outcome, such as providing a larger return on investment because of increased risk.
- If the proposal is not economically viable are the sources of subsidization identified and substantiated?
- Do the expected influence of economic factors predict a result that is desirable or undesirable for the Council's goals?

Recommended action:

Direct a subcommittee to develop criteria for evaluation of results of the Council's priorities and the economic needs of improved deployment. Direct the subcommittee to review different means to encourage deployment by addressing some of the economic factors that impede deployment (incentives).