## Appendix A — Scenarios Considered by the Task Force

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Advantages</th>
<th>Disadvantages</th>
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</table>
| Full recovery via **Fixed Network Port Access Fee** (Current process at Cornell) | • Operational simplicity  
  • Continuity with current practices  
  • Fixed port counts provided near term revenue and cost predictability | • Creates economic incentive to install multi-port repeaters (Hublets) and thereby fracture network  
  • Erodes CIT revenue stream over time  
  • No feedback to customer for excessive consumption  
  • Obfuscates relation between consumption and needed resource investment over time.  
  • Only partially documents and justifies expansion of CIT resources (e.g., purchase more Internet bandwidth) |
| Full recovery via **Headcount Tax** (Fixed monthly charge to departments based on number of faculty, staff, and students associated with the department) | • Operational simplicity  
  • No economic incentive to disconnect ports and thereby fracture the network  
  • Provides revenue and cost predictability | • No feedback to customer for excessive consumption  
  • Obfuscates relation between consumption and needed resource investment over time.  
  • Does not document and justify expansion of CIT resources |
| Full recovery via **Usage-based Billing** (Variable charge to departments that is based upon users’ consumption) | • Feedback to customer for excessive consumption  
  • No economic incentive to disconnect ports and thereby fracture the network  
  • Fully documents higher fees based on use  
  • Allows demand to justify expansion of CIT resources | • Unpredictable revenue stream  
  • Operationally complex and expensive  
  • Limited ability to reduce cost due to decline in consumption in the short term |
| Full recovery via a **Hybrid** of the above solutions | • Provides some revenue stability  
  • Minimal economic incentive to disconnect ports and thereby fracture the network  
  • Feedback to customer for excessive consumption  
  • Mostly documents increased charges based on use  
  • Allows demand to justify expansion of CIT resources | • More operationally complex than fixed network port fee or headcount tax based systems but less complex than a pure usage-based billing system. |