1. Compile a list of ISPs in your town or city (use Seattle WA). If you live in a rural area with few options, select a nearby city with more options so that you'll be able to include some of the private WAN technologies in addition to residential WAN offerings. (please try to select a city in Washington state near seattle)

**Solution 1:**

List of ISPs in Seattle WA are:

1. CenturyLink(DSL, Fiber, DSL-Business)
2. Xfinity(Cable)
3. Frontier(DSL,Fiber, Fiber-Business, DSL-Business)
4. Wave(Cable)
5. Startouch(Wireless)
6. MegaPath(Copper-Business, DSL-Business)
7. Comcast Business(Cable-Business)
8. Wave(Cable-Business)
9. At&t(Mobile)
10. Sprint(Mobile)
11. T-Mobile(Mobile)
12. Verizon(Mobile)
13. HughesNet(Satellite)

2. Check the Web site for each ISP to determine what broadband services they offer in your area, both for residential customers and corporate customers. Include both wired and wireless option.

Answer the following questions:

 - What are their advertised speeds?

 - How much does each solution cost on a monthly basis?

-What installation fees are there, if any?

-How far are you located from their CO? (If you're researching another city besides your own, use a fictional location in the same city.)

-What effect will this distance likely have on the actual speeds of each service option?

**Solution 2:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Service Provider** | **Type of Service** | **Advertised Speed (MBPS)** | **Cost / Month** | **Installation Fee** | **Distance (University District)** |
| Century Lnk | DSL | 10 | 34.95 | 15.00 | 4 Miles |
| Xfinity | Cable | 10 | 29.99 | 9.95 | 5 Miles |
| 25  | 39.99 |
| 250 | 149.95 |
| Frontier | DSL | 12 | 39.99 | 0 | 25 miles |
| 24 | 49.99 |
| Frontier | Fiber | 30 | 34.99 | 0 | 25 miles |
| 50 | 59.99 |
| 100 | 79.99 |
| Wave | Cable | 55 | 39.95 | 60 | 10 miles |
| 100 | 44.95 |
| 110 | 69.95 |
|  **WIRELESS PROVIDERS:** |
| StarTouch | Wireless | 6 | 165.99 | 174 | 150 miles |
| CenturyLink | WIreless | 7 | 29.95 | 0 | 4 miles |
| AT&T | Mobile | 12 ~ 5GB | 50 | 45 | 0 |
| Sprint | Mobile | 12 ~6GB | 50 | 36 | 0 |
| 12~30GB | 110 |
| T-Mobile | Mobile | 12 ~9GB | 60 | 0 | 0 |
| 12 ~11GB | 70 |
| Verizon | Mobile | 12 ~10GB | 60 | 0 | 0 |
| HughesNet | Satellite | 10 | 59.99 | 99 | 0 |
|  **CORPORATE CONNECTION PROVIDERS:** |
| Frontier | Fiber-Business | 15 | 79.99 | 0 | 15 miles |
| 40 | 139.99 |
| 100 | 950.00 |
| MegaPath | Copper-Business | 10 | 104.00 | 99 | 10 miles |
| 30 | 161.00 |
| COMCAST Business | Cable-Business | 16 | 69.95 | 0 | 9 miles |
| 25 | 99.95 |
| 150 | 249.95 |
| Wave | Cable-Business | 15 | 59.95 | 0 | 10 miles |
| 55 | 89.95 |
| 110 | 179.95 |
| Century Lnk | Cable - B | 10 | 29.99 | 0 | 4 miles |
| Frontier | DSL-Business | 15 | 79.99 | 0 | 25 miles |
| 40 | 139.99 |
| MegaPath | DSL-Business | 6 | 45.00 | 0 | 10 miles |
| 20 | 85.00 |

Distance plays a important role in speed as we go further the speed decreases but many service providers now use speed boosters after a particular intervals in order to maintain it. Distance does not affect the fibre optic connections.

Regarding Wireless connections the switches are installed along with boosters in order to produce a stronger wireless signal for the customers.

1. Search online for customer reviews of each ISP in your list. What kinds of ratings does each ISP receive online?

**Solution 3:**

Ratings of Each:

|  |  |
| --- | --- |
| **Service Provider** | **Ratings (Out of 5 Stars)** |
| CenturyLink(DSL, Fiber, DSL-Business) | 4.5 |
| Xfinity(Cable) | 4.5 |
| Frontier(DSL,Fiber, Fiber-Business, DSL-Business) | 2 |
| Wave(Cable) | 1.75 |
| Startouch(Wireless) | 5 |
| MegaPath(Copper-Business, DSL-Business) | 4.75 |
| Comcast Business(Cable-Business) | 4.75 |
| Wave(Cable-Business) | 1.5 |
| At&t(Mobile) | 5 |
| Sprint(Mobile) | 5 |
| T-Mobile(Mobile) | 5 |
| Verizon(Mobile) | 5 |
| HughesNet | 5 |