

Jan 31

Bad Internet
Coverage

* Put tax incentives
to encourage companies
to go there

Figuring out input

- * Determining the critical locations to deploy satellite/wifi points
- * Figuring out the needs/problems for companies & people

Alg

~~new~~

Objectives

- * Regulating the min. speed for new infrastructure

Figuring out
the output

Good Internet
Coverage

n women

Stable matching (marriage)

$$W = \{w_1, w_2, \dots, w_n\}$$

n men

$$M = \{m_1, m_2, \dots, m_n\}$$

$n=2$

$$W = \{\bar{J}A, AJ\}$$

$$M = \{BP, BBT\}$$

Def (Matching) A subset $S \subseteq M \times W = \{(m, w) \mid m \in M, w \in W\}$

is a matching if

(i) $\forall w \in W, \exists \text{ at most one man } m \in M, (m, w) \in S$
AND

(ii) $\forall m \in M, \exists \text{ at most one woman } w \in W, (m, w) \in S$

Def (perfect matching) at most \leftarrow EXACTLY

$$BP \rightarrow JA$$

$$BBT \rightarrow AJ$$

$$M_v \quad P_v$$

$$BP \rightarrow JA$$

$$BBT \rightarrow AJ$$

$$M_x \quad P_x$$

$$BP$$

$$BBT$$

$$M_v \quad P_x$$

$$\bar{J}A$$

$$AJ$$