

Istituto di Istruzione Superiore  
Della Corte - Vanvitelli · Cava de' Tirreni (Sa)

il giorno 21 febbraio 2017

Presenta

“Competitività europea e mondiale: porti e aeroporti”

Relatori

Prof. Ing. Giulio Erberto Cantarella “Università degli Studi di Salerno”

Prof. Ing. Stefano De Luca “Università degli Studi di Salerno”

presso l’Auditorium IIS Della Corte-Vanvitelli di Cava de’ Tirreni (SA)

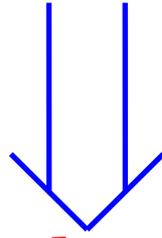


**METODOLOGIE  
PER LA ANALISI  
E LA VALUTAZIONE  
DI PIANI DI INTERVENTO  
SU UN SISTEMA DI TRASPORTO**

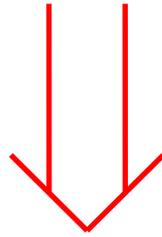
**G.E. CANTARELLA**

**Università di SALERNO**

scelte progettuali



piano di intervento



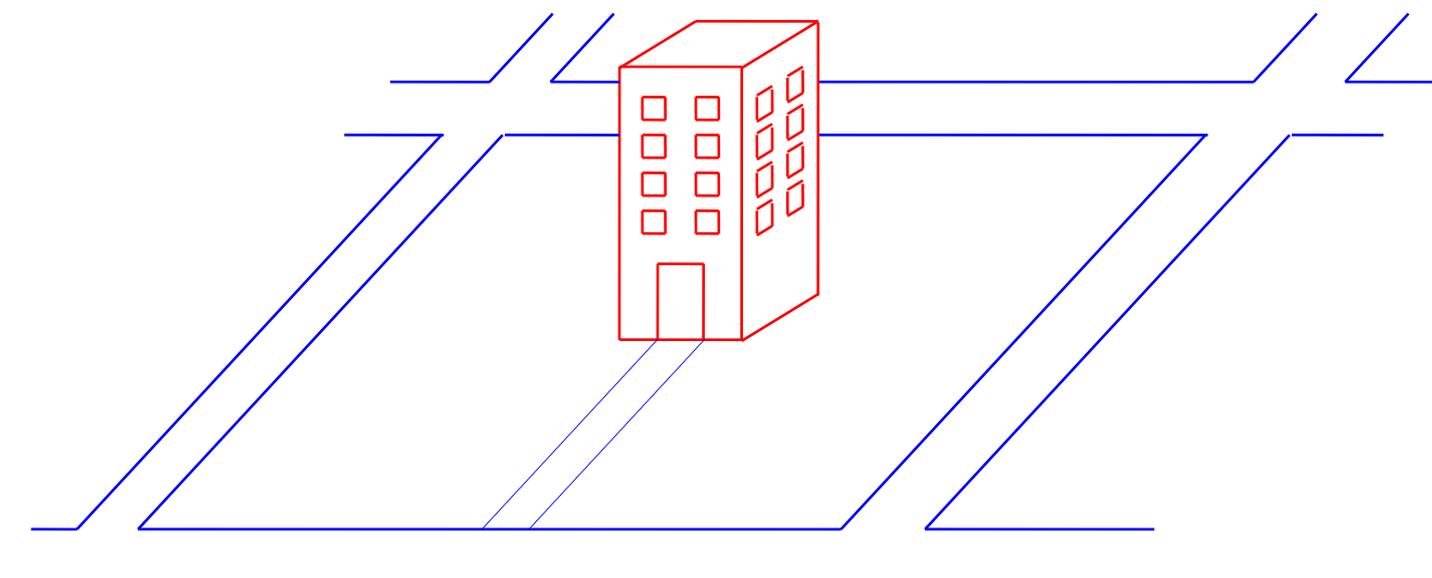
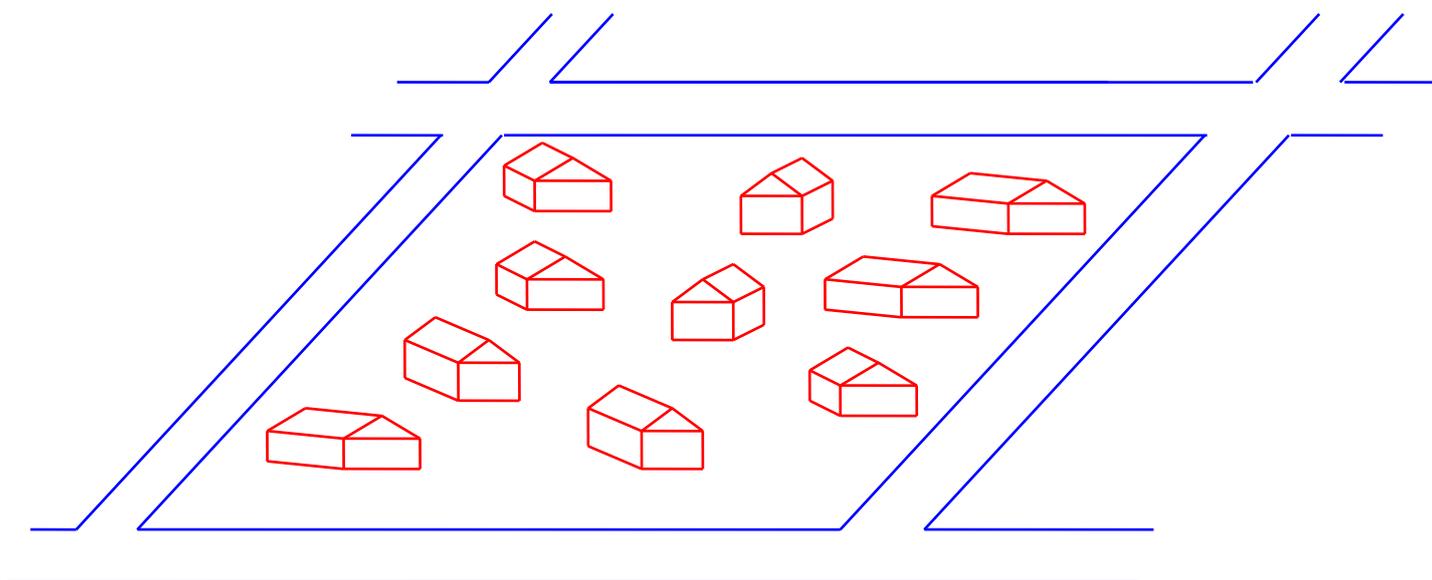
PRESCRIZIONI

INDICAZIONI

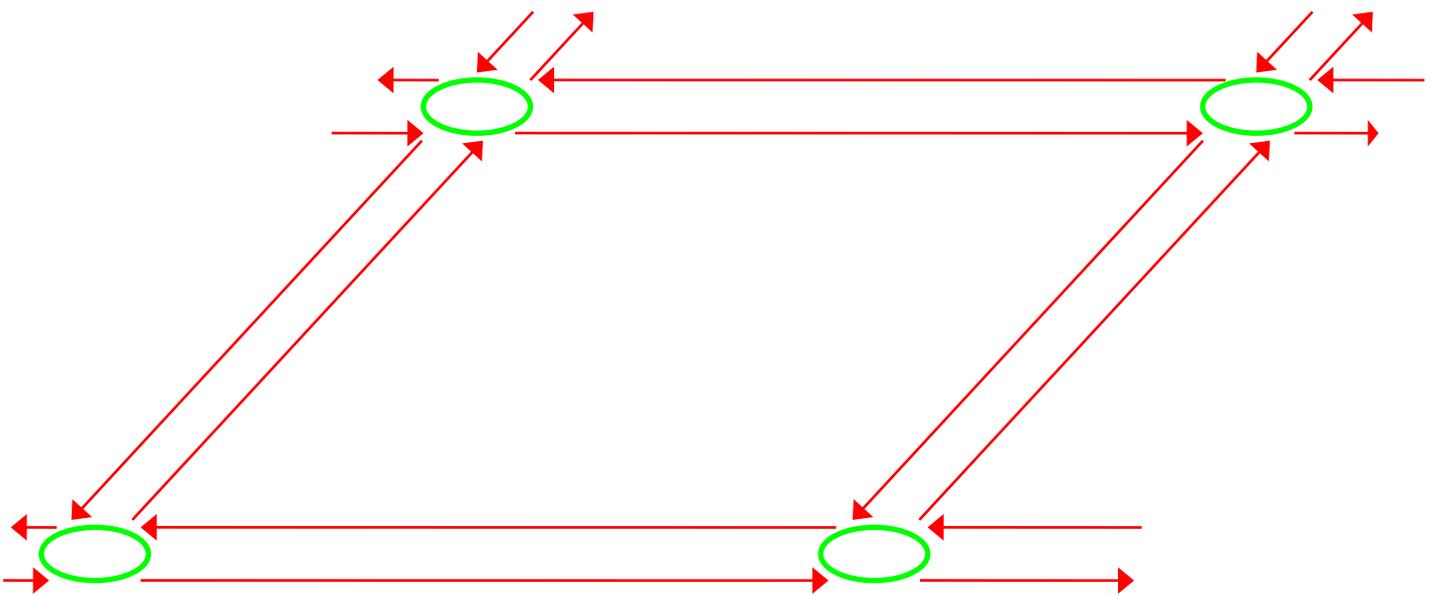
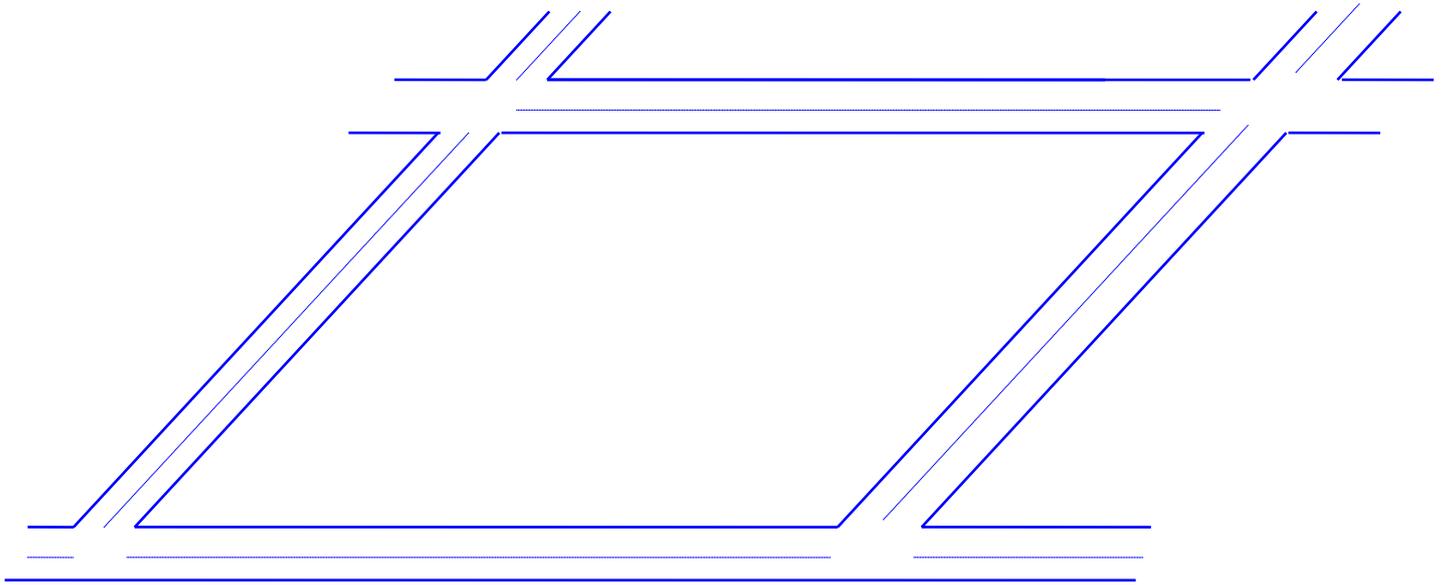


COMPORTAMENTO  
DEGLI UTENTI

# zonizzazione



# connessioni di base e grafo

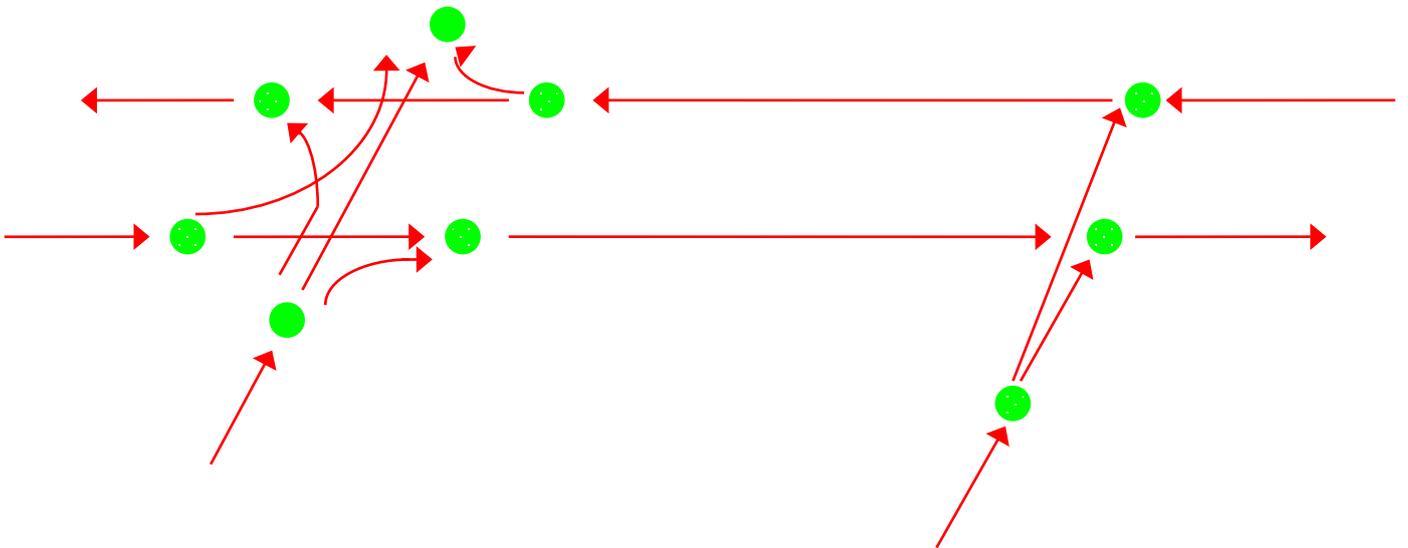
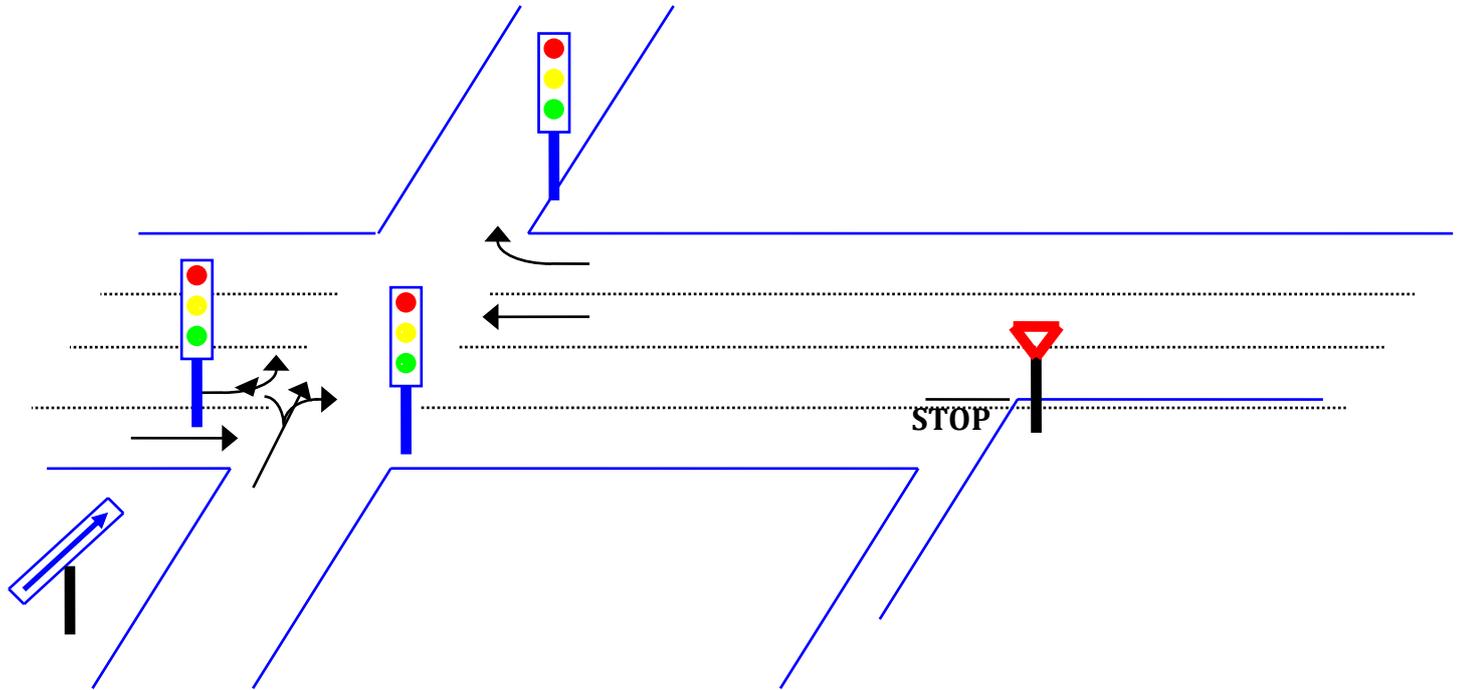


$$\mathbf{B} = [b_{ij}]$$

$$\mathbf{f} = \mathbf{B} \cdot \mathbf{h}$$

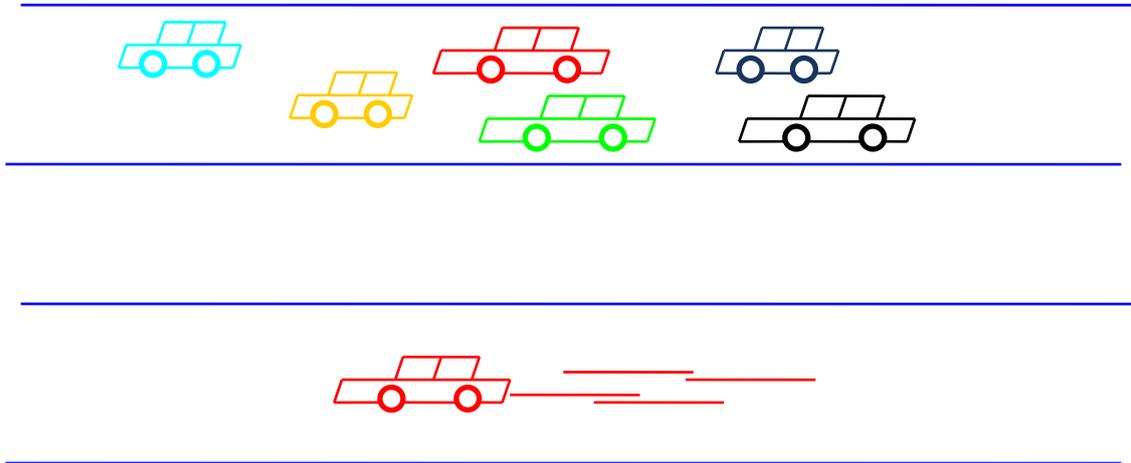
$$\mathbf{g} = \mathbf{B}^T \cdot \mathbf{c}$$

# schemi di circolazione

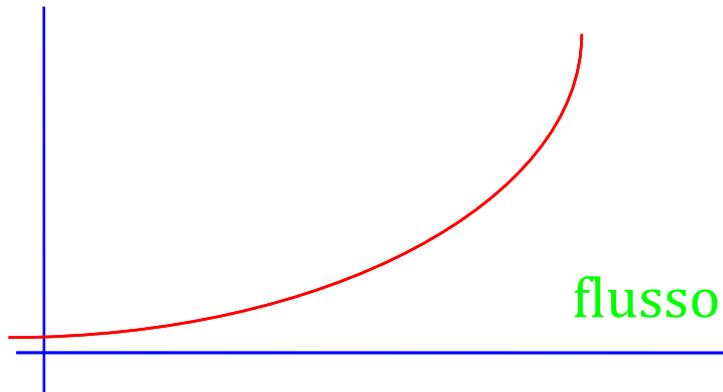


# funzioni di costo

congestione

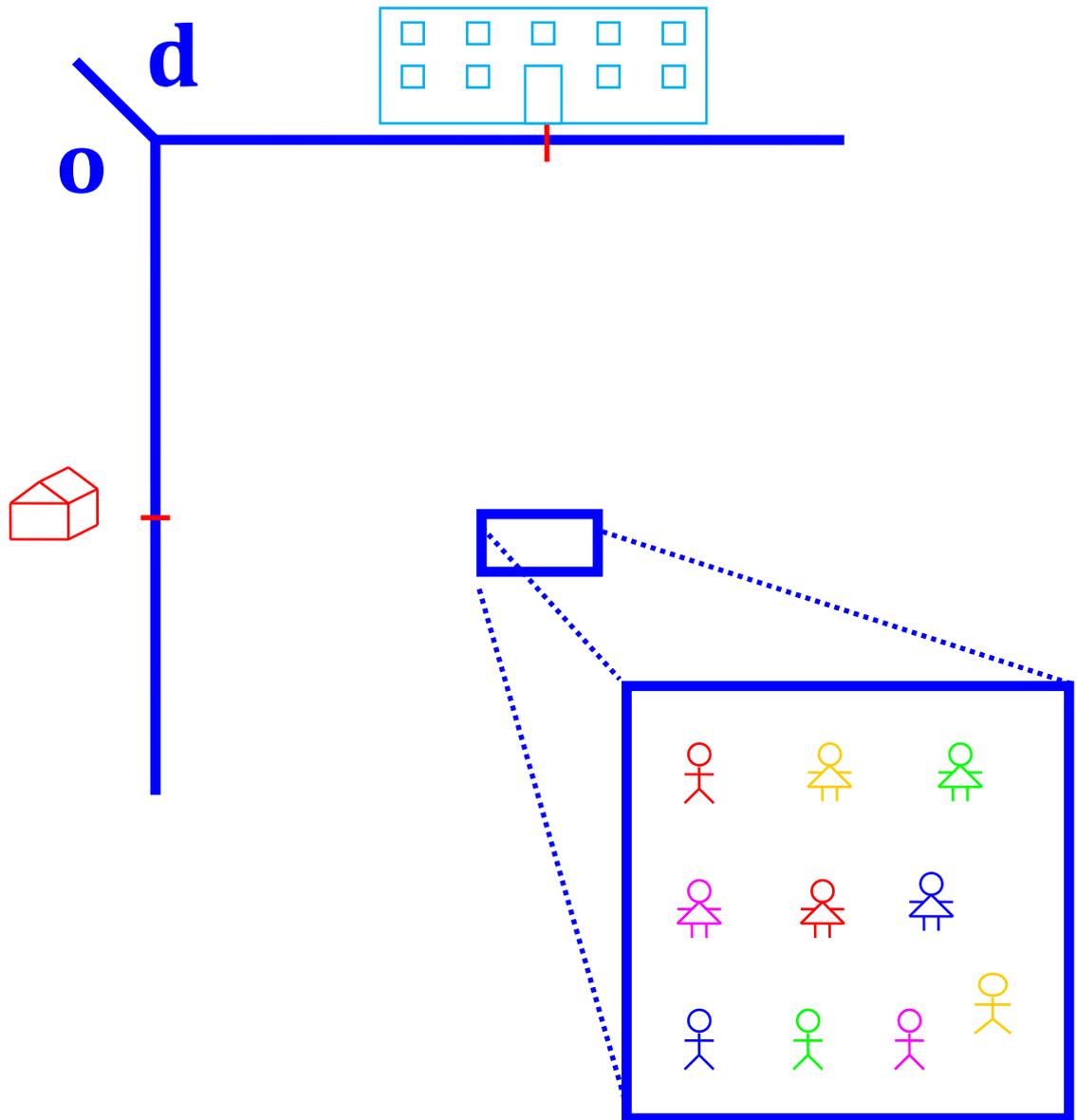


tempo



$$c = c(f) = t_0 \left( 1 + \alpha \left( \frac{f}{\text{cap}} \right)^\beta \right)$$

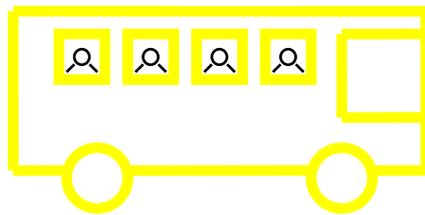
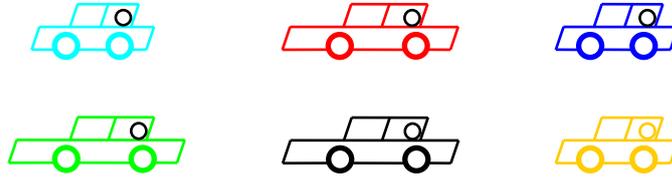
# matrice O/D



$d_{od}$

per scopo, categoria, fascia oraria

# scelta del modo

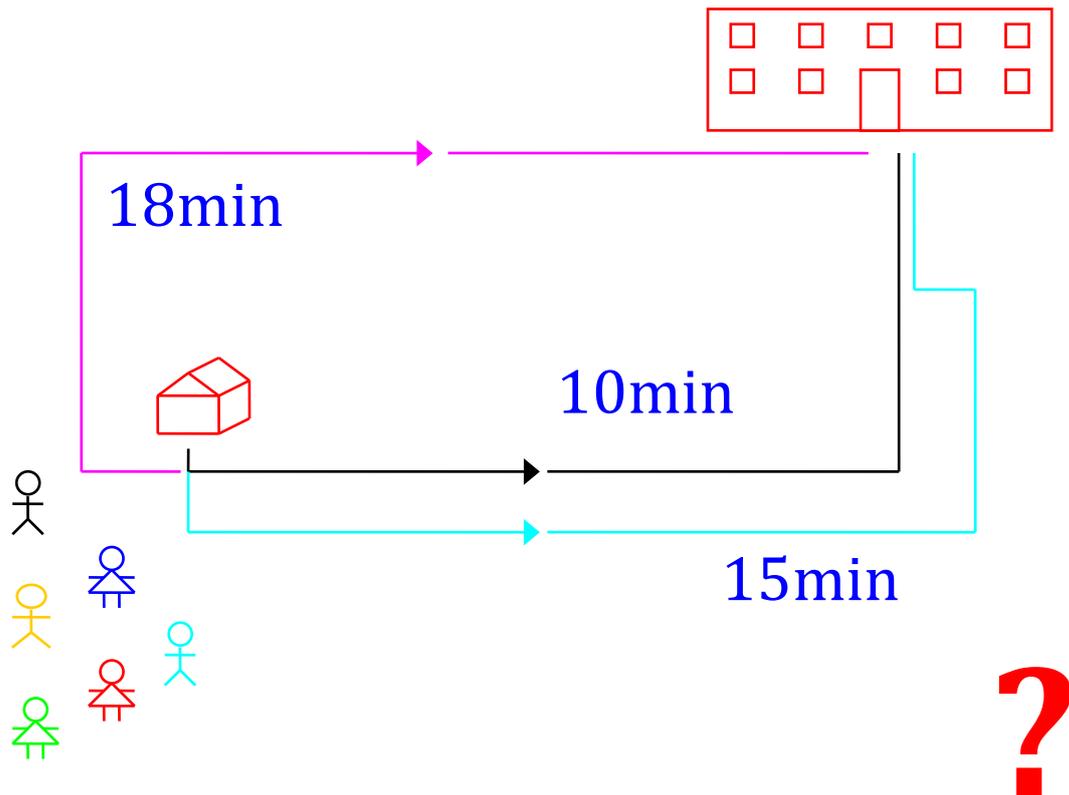


$$V_m = -\beta_c \text{ costo} - \beta_t \text{ tempo}$$

$$p(m/ods) = \frac{\exp(\theta v_m)}{\sum_j \exp(\theta v_j)}$$

$$d_{odm} = d_{od} \cdot p(m/ods)$$

# scelta del percorso

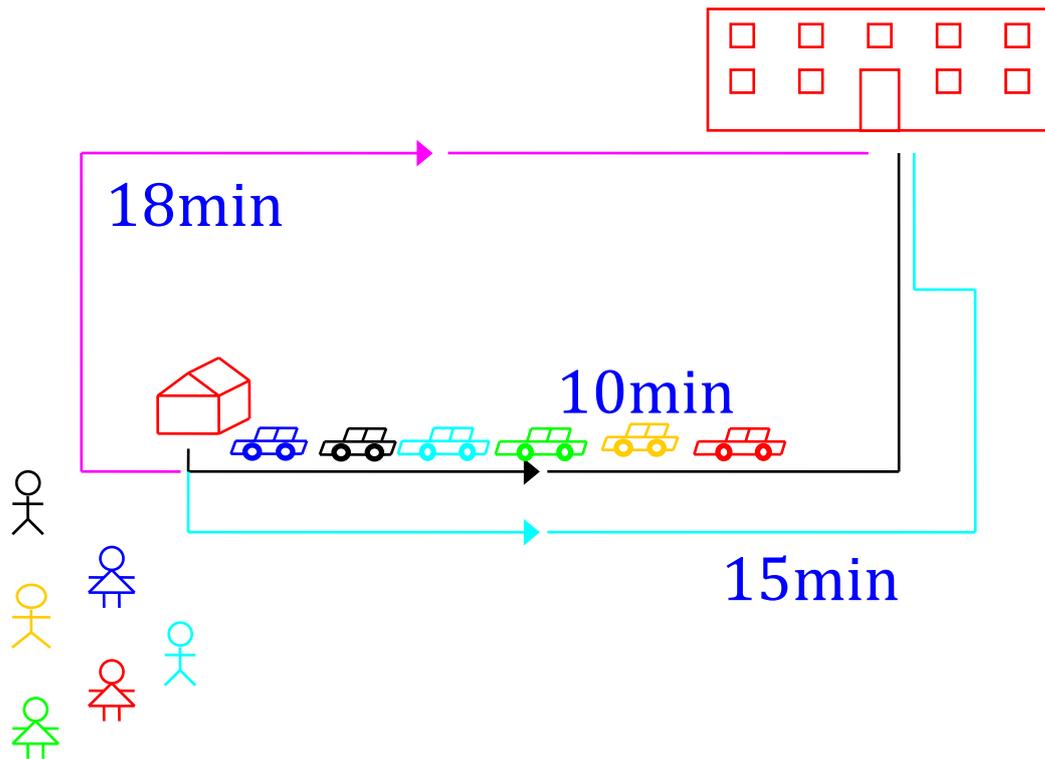


$$p(k/odm) =$$

$$P = P(g)$$

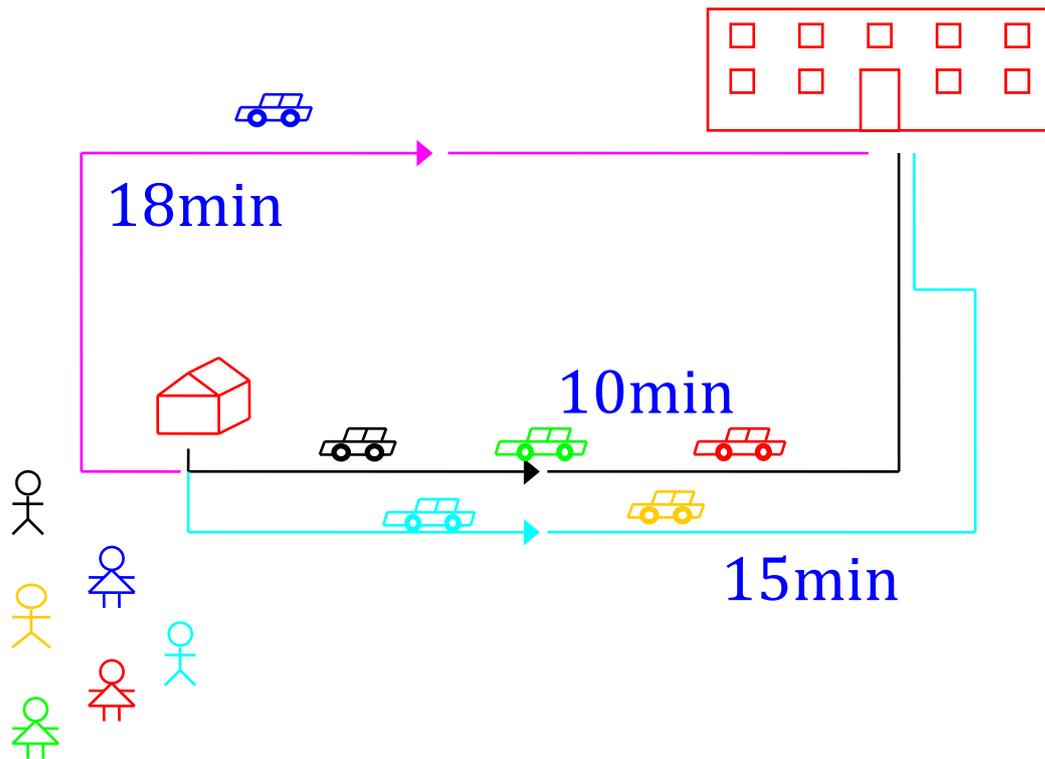
$$h = P \cdot d$$

# scelta del percorso modello deterministico



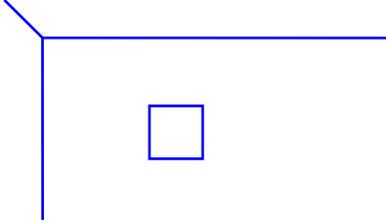
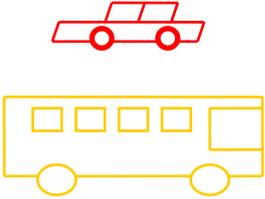
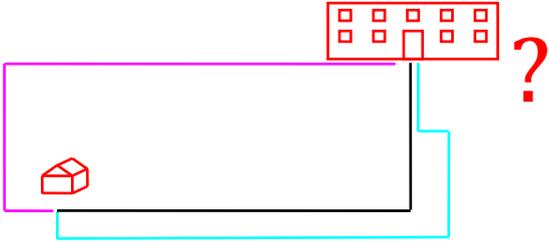
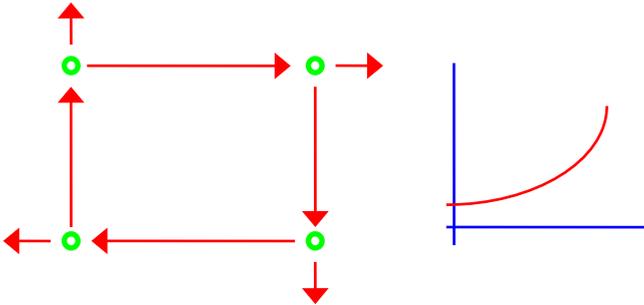
$$p(k/odm) = \begin{cases} 1 & g_k = g_{MIN} \\ 0 & g_k > g_{MIN} \end{cases}$$

# scelta del percorso modello probabilistico



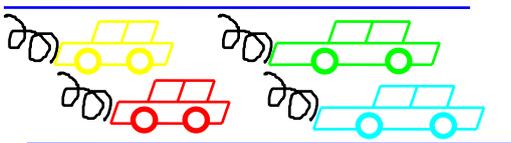
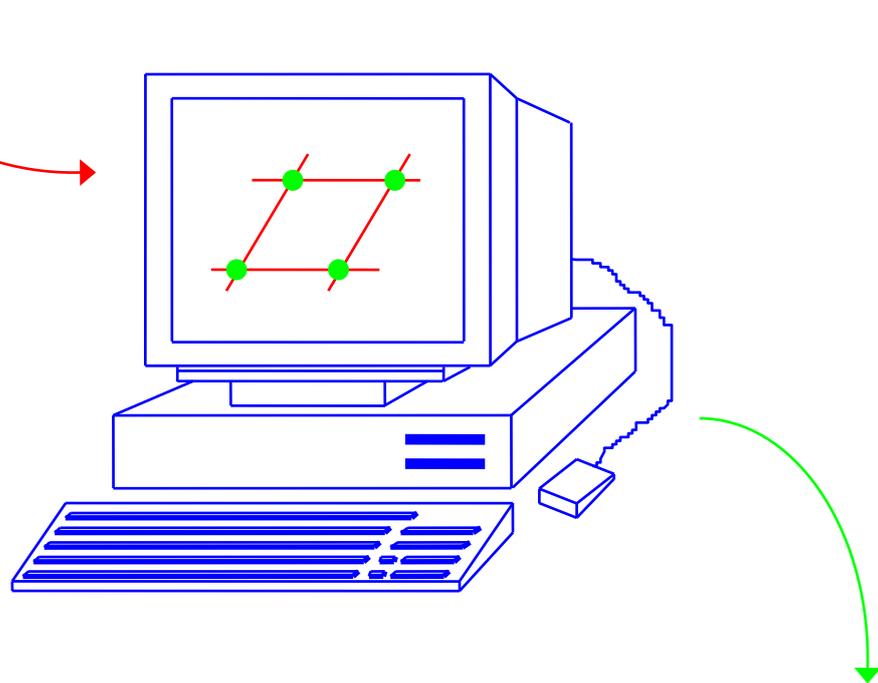
$$p(k/odm) = \exp(-\theta g_k) / \sum_j \exp(-\theta g_j)$$

# metodi di assegnazione

	
	$d_m$
	$P = P(g)$ $h = P \cdot d$
	$f = B \cdot h$ $c = c(f)$ $g = B^T \cdot c$

# ANALISI

piano di  
intervento



FLUSSI SUGLI ARCHI  
tempi di viaggio,  
impatti, esempio:  
inquinamento, ...

# VALUTAZIONE

