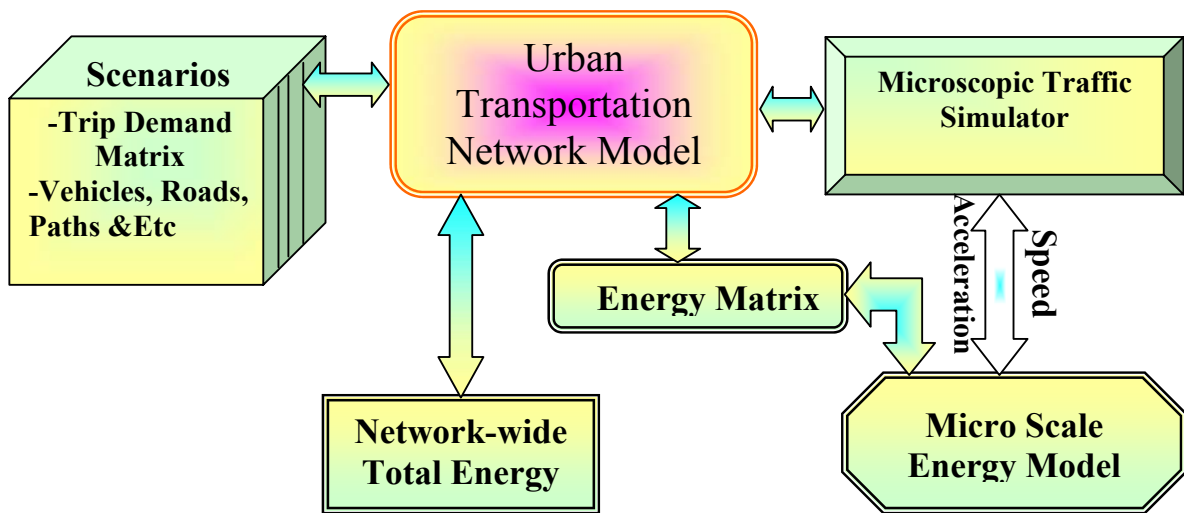

Emails: hamona58@yahoo.com , gharibi@ifco.ir , rajabi@ifco.ir , iravani@ifco.ir

:

(ESM)

[1,2].



[7] (Urban Transportation Network Model)

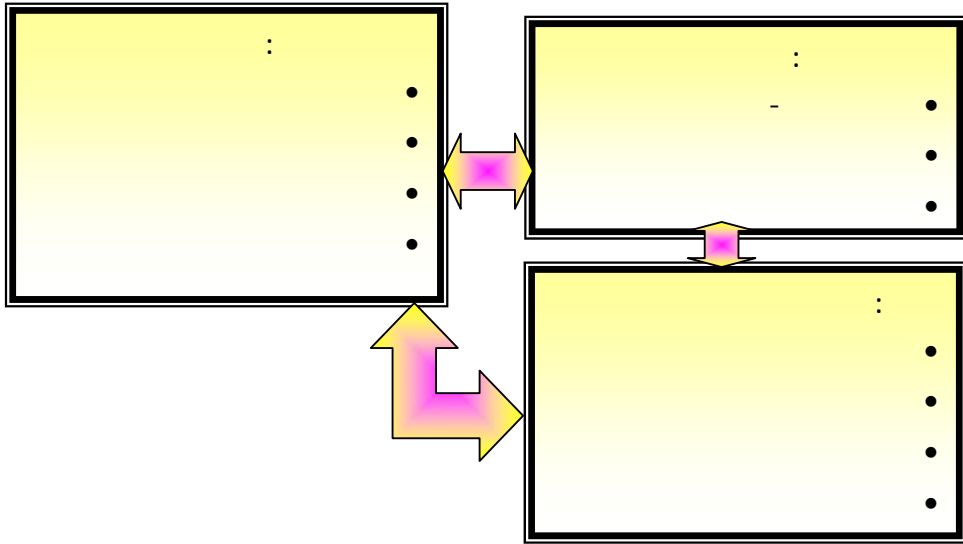
CO2
[3].



[7]:

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[3]

-

[7]

(Transit Vehicle Type)

}

}
}
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(..

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(

)Transit

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$$((\quad) \quad) \quad (\quad)$$

$$t_{ij}(x_{ij}) = t_{ij}^0 \left(1 + \alpha \left(\frac{x_{ij}}{Q_{ij}}\right)^n\right) \quad [6]$$

$$\alpha = 0.15, n = 4$$

$$\begin{aligned} t_{ij}^0 &= \mathbf{i,j} \\ x_{ij} &= \mathbf{i,j} \end{aligned}$$

$$\begin{aligned} t_{ij} &= \mathbf{i,j} \\ Q_{ij} &= \mathbf{i,j} \end{aligned}$$

:

$$\text{Min} \sum_{(i,j) \in A} x_{ij} t_{ij}(x_{ij})$$

s.t.

$$\dots x_{ij} = \sum_s x_{ij}^s \quad \text{s} \quad \mathbf{i,j} \quad)$$

$$\dots x^{ks} = \sum_{(k,l) \in A(k)} x_{kl}^s - \sum_{(l,k) \in B(k)} x_{lk}^s \quad [6] \quad \mathbf{i,j}$$

$$\dots x_{ij}^s \geq 0 \quad 1 \quad 1 \quad)$$

$$\dots \forall (i, j) \in A \quad 1$$

$$\dots \forall s \in V$$

$$V =$$

$$A =$$

(Interactions of Model)

- -

(Trip Demand Matrix)

-

(...)

(Land Use)

[7].

()

(Data Base)

-

(Microscopic Traffic Simulator)

-

)

...

:

:

$$v = \frac{1}{2} \left(v_0 + \sqrt{v_0^2 - \frac{4v_0 Q}{k_j}} \right)$$

$v =$ *Velocity*

$v_0 =$ *Free, Velocity*

[5]

$Q =$ *Road, Capacity*

$k_j =$ *Congestion, Density*

(Micro Scale Energy Model)

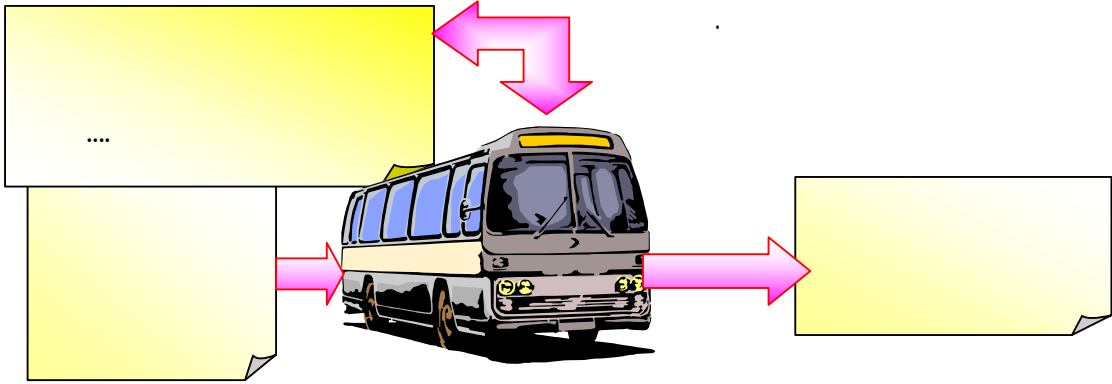
(Energy Matrix)

-

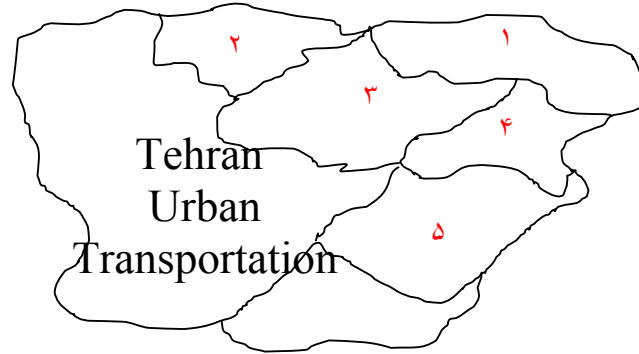
(Network-Wide Total Energy)

[4](Micro Scale Energy Model)

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[7](-) - -

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- 1-“Energy System Model Software Version 82.0 Report(ESM Model)”, Sharif Energy Research Institute (SERI), Dr. Y. Saboohi, 2003
- 2-“Model for Analysis of Demand of Energy (MADEII Model)”, Sharif Energy Research Institute (SERI), Dr. Y. Saboohi, 1986
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