

The Public Administration Help Tank



INODA

and

Rotary

Madras



The Public Administration Help Tank

Improving
Transportation, Culture,
Environment and Quality of Life



Auto Fares

Negotiated

Based on Historical Fares



Auto Fares

Time Fare is forgotten!

So any revision will not be remunerative in crowded traffic



The Problem

- Fares not linked to costs
- Time cost not considered
- Permits not related to demand
- Licensing not to knowledge
- Outdated engineering
- Exploitative culture at all levels



Autos and Chennai

- Only to-door service in Madras
- Small turning radius
- Social contribution of autos to be realised by Government and public



The Public's Prayer

- Any time, any place
- Available where they want
- No tampered meters
- Courtesy
- Reasonable fare
- No wars when petrol prices go up



The Auto Driver's Prayer

- Decent living income
- Freedom from financiers/ owner cartels
- No bureaucratic harassment
- Security for family and future
- Respectability



The Caution

- High fares chases away customers
- Low income chases away good drivers



The Facts of Life

- Demand decides fares
 - More demand less expensive
- City size decides structure
 - Small towns will have point fares
 - Large cities can afford lower fares



If projects can be costed, why
not auto fares?

If you pay peanuts, you will get
only monkeys to work for you



Elements of Cost Accounting

- Fixed Cost- Overheads
- Variable Cost- Fuel and maintenance
- Labour

- *Call it any other way-- Cost is a fact*



Some Stats: Revenue Days

■ Days in a year	365
■ Sundays/ Weekly off	52
■ Festival Holidays	13
■ Breakdowns, Service	12
■ FC Preparation	10
■ Revenue days a year	278



Costs of Autorickshaw Service

- Cost of auto Rs 80,000
- At 5 year payback @24% IRR and residual Value of Rs 30,000
- Cost per day at 256 days/ yr: Rs 60
- *Permit adds Rs 20 per day-- 33%*



Unamortisable Permit Cost

- Cost of Permit plus expenses Rs 24,000
- Cost per day at 256 days/year, 5 years: Rs 20
- *Why should permits be saleable?*



Direct Cost Data

■ Revenue Km per day	100
■ Search	25
■ Empty Returns	40
■ Shed run	10
■ Total running	175 Km/day



Fuel Costs

- Cost of petrol/ Oil Rs 40
- Fuel consumption 25 - 35 Kmpl
- Per Km (5 year auto) 1.35
- Per Revenue Km 2.35
- *Re 1 increase in petrol cost, Km charge should increase by 6 paise or 1.5%*



Maintenance Costs

- 175 km per day is 50,000 Km per year
- Reboring/ engine work at 2 years
- Cost of tyres, battery
- Insurance, Fitness Certificate

- Total: Rs 10,000 / year-- Rs 40 per day



Driver Income: How much

- A PTC driver earns Rs 5000 plus plus
- A household driver earns Rs 4000
- Should cover risk in variation
- Festival assistance/ bonus
- Medical
- Social security-- PF and gratuity



Statistics: Earning Days

■ Possible Revenue Days	278
■ Sick Leave/ casual	12
■ Vacation	15
■ Entwining Sundays	(5)
■ Actual Earning days	256



Earnings Data

■ Earning per month	Rs 3000	
■ PF/Savings 12.5%	360	
■ Medical protection	250	
■ Festival bonus 1 month	250	
■ Gratuity/ social security	250	
■ Income required per day		200



Traffic Statistics-- Fare Basis

- 260 working days a year
- 7 revenue hours a day
- 100 revenue Km per day
- 60 search/ return cruising per day
- 15 Km to and from shed
- 25 trips per day



Revenue Required

■ Fixed Cost	Rs 60 per day
■ Maintenance	40
■ Fuel 175 Km	235
■ Driver earning	200
■ Dislocation Adjustment	15
■ Total	Rs 540-600 per day



Simplified Fare basis

- Revenue required Rs 540 - 600
- Revenue Km per day 100

- Per Km rate 5.40 - 6.00

- Will not reward short distance rides!



Behavior Rewarding Fare

- Short distance fare to be remunerative!
- Short rides need more time/ search

- Minimum fare Rs 10.00 *for first Km*
- Per Km rate 4.00



Behavior Rewarding Fare

- Income from 100 Km Rs 400
 - Minimum from 25 rides 150
 - Total 550
-
- This structure also leaves more money for driver from short rides



Impact of 4 Rupee fare

Rate	20 Trips	25 trips	30 trips / day
5 per km	500	500	500
4 + 10	520	550	580



Surcharge for better Behavior

- Station/ theatre surcharge
 - Rewards congregation traffic
 - Compensates for empty return
- Luggage/ Third Passenger surcharge
- Night Surcharge: 11pm - 6 am 100%
- Petrol Increase Surcharge: 1.5% for every Rupee increase



Traffic Surcharges

- Peak hour surcharge
 - Evens out traffic to all hours
 - Compensates petrol in slow traffic
- Business Area Surcharge
 - Decreases traffic in crowded areas
- Holiday surcharge



Required: Statistics Bank

- Demand Statistics
- Utilisation
- Entry Economics
- Quality of Service



Logic of Fares

- Quality of Service (QoS)
- Demand
- Affordability
- Alternate means

- *Need for continuous statistics!*

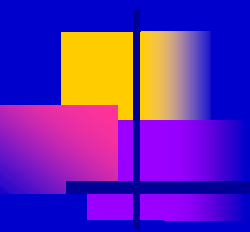


QoS: Immediate Availability

More vehicles required

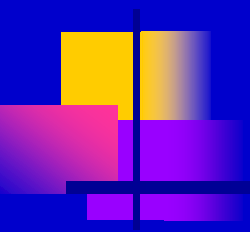
Less revenue for each

Higher fares required



QoS: Available anywhere

Search cruising increases



QoS: To ply anywhere

Empty cruising increases



QoS: Good quality vehicle

Fixed cost increases



QoS: Knowledgeable driver

Remuneration must be more



Factors of price and traffic

- Total demand in Passenger-Km
- Trips per day
- Trip distance, duration, occupancy
- Empty cruising time and distance

- Decides number of permits



Night Service

- Same exercise of demand assessment
- Trip patterns



Government help

- Establish 'Auto Stops'
- Liberty to charge lower fares
- Passenger elected fare sharing
- Driver/ corporate permits
- Statistics bank
- "Auto and Taxi Commission"



The Public Administration Help Tank

Improving
Transportation, Culture,
Environment and Quality of Life



Call Service

- Broadcast system
- Auction for service
- Call Locator
- City identification
- Delinquency and situation control--
 - drivers, passengers, and pranksters



Presentation to

The Commissioner of Traffic
Chennai

7 Nov 2002