



# Stockholm Public Transport

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**Transport administration**  
**Purchasing and Procurement Department**

# The Stockholm Region (County)

- 1 of 18 counties
- 26 municipalities
- 2 million people
- About 40,000 new inhabitants every year





# Transport administration

Traffic Committee of Stockholm County council has responsibility for all public traffic and special traffic within county

- Traffic administration (PTA) has responsibility to manage and develop operation
- Traffic operates under tree brands



*Stor Stockholms  
lokaltrafik*



*Waxholmsbolaget*



*Färdtjänsten*



*Spårvägmuseet*

# Strategic framework for Transport administration



The Regional Development plan for Stockholm county (RUFS)  
The Regional Traffic plan  
Strategies  
Guidelines

# The Transport Administration plans, orders and monitors



- All transport services are provided by private transport operators and procured by the Transport Administration in competition
  - Subway, commuter train, light railway, tram buss and boat
- The Transport Administration's focus is on overall planning, ordering and monitoring of transport services, while transport companies are responsible for the detailed planning, deliveries and primary customer contacts

# Short about our traffic

18 billion SEK  
cost for traffic  
operations and  
maintenance

3 million  
boarding's/day  
78%  
satisfied customers

99 %  
of traffic runs  
on renewable  
fuels

80%  
market share  
in the morning  
rush hour



# Short about our infrastructure

900 000 m<sup>2</sup>  
real estate

1 000  
rolling stock

470 km  
tracks

270  
stations and  
30 depots

6,2 billion  
investments/  
year

# Vision

**"An attractive, sustainable and growing Stockholm region with the freedom of citizens to shape their own lives and make critical decisions"**



# The Stockholm region's challenges

- The strain on public transport is increasing which leads to:
  - Greater need for investment and development
  - Increased costs
- A fundamental issue is that:
  - Public transport can be developed by at least the same rate as population growth
  - The whole transport system is planned so that public transports market share will increase



# Stakeholders in collaboration

**"Stockholmers"**  
Citizens and travelers,  
voters and tax payers

**Municipalities**

**Stockholm  
County Council  
Assembly**

**Transport  
Administration**

**Company's**  
Vehicle, el, telecom



Blidö Sundsbolaget



INFRA NORD







# BUSINESS STRATEGY

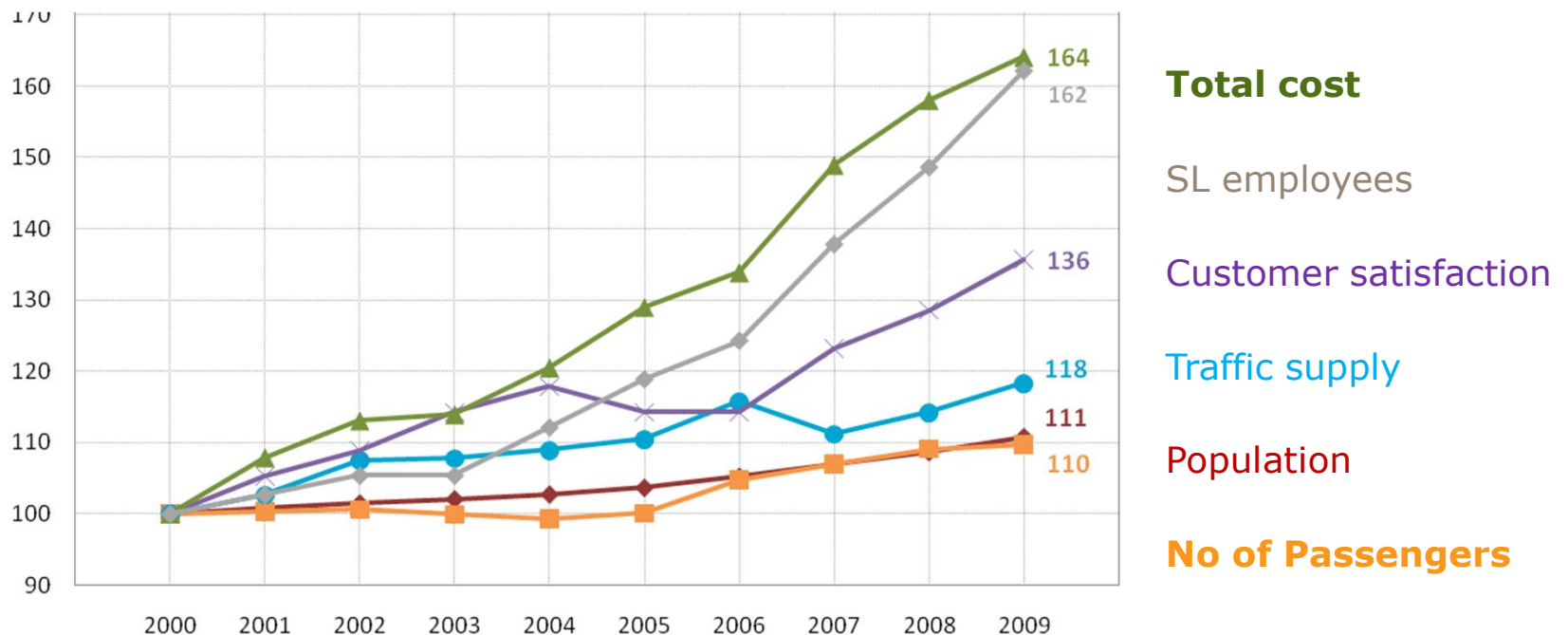


# History - from inhousing to outsourcing

- 1993 – 2002
  - From “inhouse” to outsourcing
  - Main target – lower costs
    - Lowest price in tenders
  - Contracts based on production
  - Tendering effect -10% reduced cost
- Results of early procurements
  - Contracts where underpriced
  - Focus only on cost reduction
  - Poor quality
  - Did not align with all our targets
  - Lack of customer focus
  - Lack of revenue focus
  - Lack of systematic work and focus on
    - enhancing the system efficiency



## History – lack of correlation between cost increase and # passengers



- Costs, SL employees but also customer satisfaction has increased during the period 2000-2009
- The number of passengers has not increased enough in relation to costs, percentagewise to population the mode share has not increased perceptibly

# Our business strategy

## **Create and develop businesses to meet our goals**

- Strong branding
- Increased revenues
- Business founded on an understanding of supplier perspective
- Payment model that create incentives for the supplier to meet our goals
- Life cycle perspective

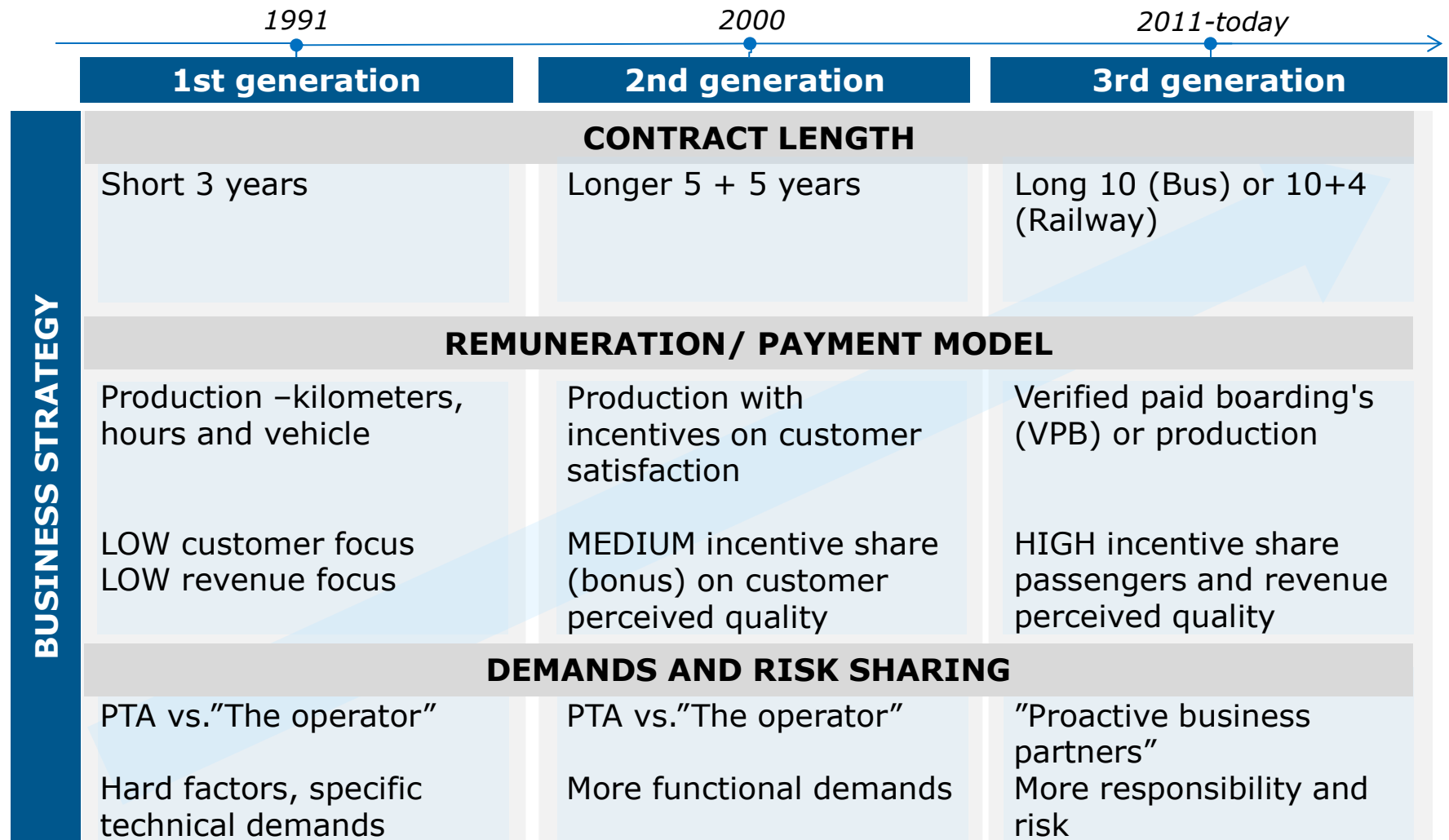
## **Optimize responsibility and risk sharing to maximize value for money**

- Increased responsibility to supplier
- Correct risk sharing (to the part that can manage the risk best)
- Keep control of strategically important assets
- Functional requirements
- Seek collaboration when potential to increase efficiency





# Development of traffic operation contracts – our 25 year perspective



# What do we want to achieve?



Free translation of our  
goal model

# Bus contract business structure



## CONTRACT INCLUDES

TRAFFIC  
OPERATIONS OF  
AREA

ANALYSIS,  
PLANNING AND  
LOCAL  
MARKETING

BUSES  
OWNERSHIP  
/FINANCE

BUS  
MAINTENANCE

DEPOT  
MAINTENANCE

BUS SHELTER  
MAINTENANCE

## REMUNERATION /PAYMENT MODEL



= *"Operator is reimbursed based on how many customers board the bus with a valid ticket"*

*We call this VPB –  
Verified Paid  
Boardings*

Revenue and cost  
efficiency focus

Customer focus

Attractive traffic  
solutions

Increased ridership



# Railway contract business structure



## CONTRACT INCLUDES

TRAFFIC  
OPERATIONS OF  
SYSTEM

STATION  
MAINTENANCE

VEHICLE  
MAINTENANCE

DEPOT  
MAINTENANCE

## EXCLUDES

VEHICLE  
OWNERSHIP  
/FINANCE

TRACK  
MAINTENANCE &  
SIGNAL  
SYSTEMS

## REMUNERATION /PAYMENT MODEL



= *"Operator is reimbursed based on production (train complemented with vehicle km) as well as heavy incentives on perceived customer satisfaction"*

Cost efficiency  
focus

Customer focus

Attractive traffic  
solutions

Increased ridership

# Contracting in large areas and/or systems with a “whole system” network approach

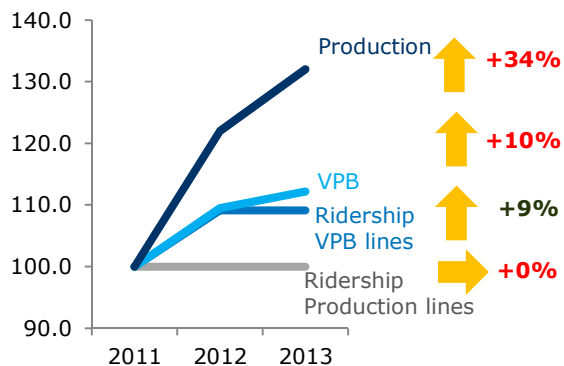
- Bus contracts are tendered in geographic areas, often one or several municipalities
  - Including lines within the area
  - In some cases another PTO line can “cross” within another PTO area
  - Depots are strategic infrastructure and important factor
  - *Economies of scale vs. competition (in tender and over time)*
- Rail contracts are tendered as a whole “system”
  - All connected lines/tracks within the “system” for example Metro, a light rail line
  - In one case connected in one contract with bus areas (E20) bus areas, light rail and tram
  - *Impact of infrastructure limitations and business risk*

*Our network approach is to strive for large contracts (but retaining competition) with big responsibilities (and incentives) for the PTO. To create strong functional demands and drivers to collaborate, plan together from a “whole journey” approach in order to create a better service for the customer – “one ticket one journey”*

# Analysis of our "oldest" bus contract displays positive results (from 2011)

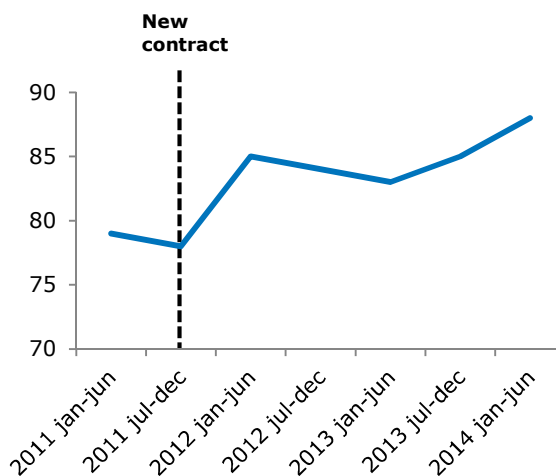
## Increased cost efficiency

- Costs of production lines has increased with 34% but without increased ridership
  - We have financed traffic services that do not generate new revenue*
- Costs of VPB lines has increased in line with the increased ridership



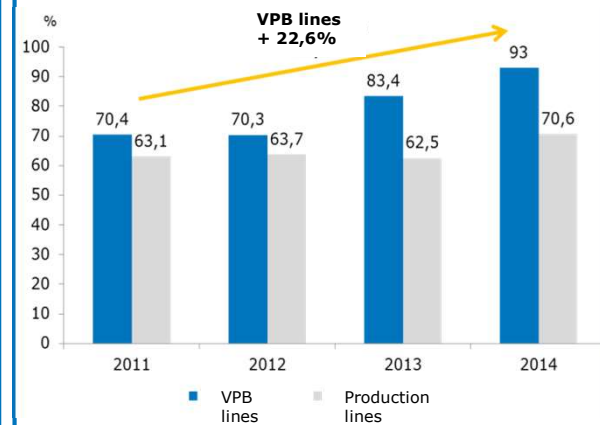
## Increased customer focus

- Customer perceived quality has increased from 79% to 88% during the contract period



## Increased revenue

- # of validated tickets has increased since the start of the new contracts, the increase is 22,6% on the VPB lines





# Risks in VBP contracts

## RISK

Low density lines  
with high social  
benefit are reduced

Crowded vehicles

Unnecessary  
changes for  
passengers

Lower level of direct  
control for PTA

## Mitigation

Limit the freedom to reduce traffic by requirements about minimum number of departures

Requirements on maximum use of standing capacity in vehicles

All suggested changes must be analyzed and approved by PTA

Important for PTA to analyze the needs and to set the right requirements to avoid need for changes during the contract life time

## Conclusions along the way

- By steering with **functional demands, goals and larger economical incentives**, and at the same time give **freedom within boundries**, we can really release the market force and create more **customer value**
- ... AND at the same time create more **economic efficiency**
- It is not easy! It is **a process** internally, and externally. Control mechanisms are necessary!
- It is important to work hard in **early stages**!
- **Dialogue**, as open as can be, with the market, municipalities, customers/organizations are vital!

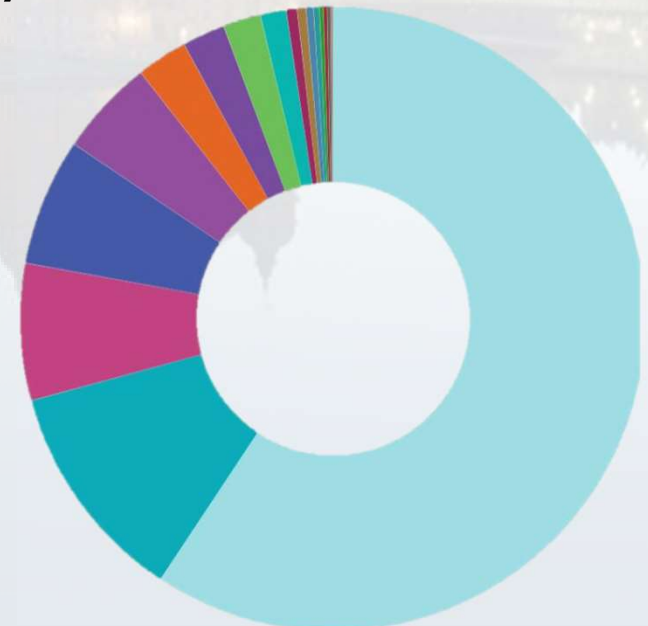


# PROCUREMENT



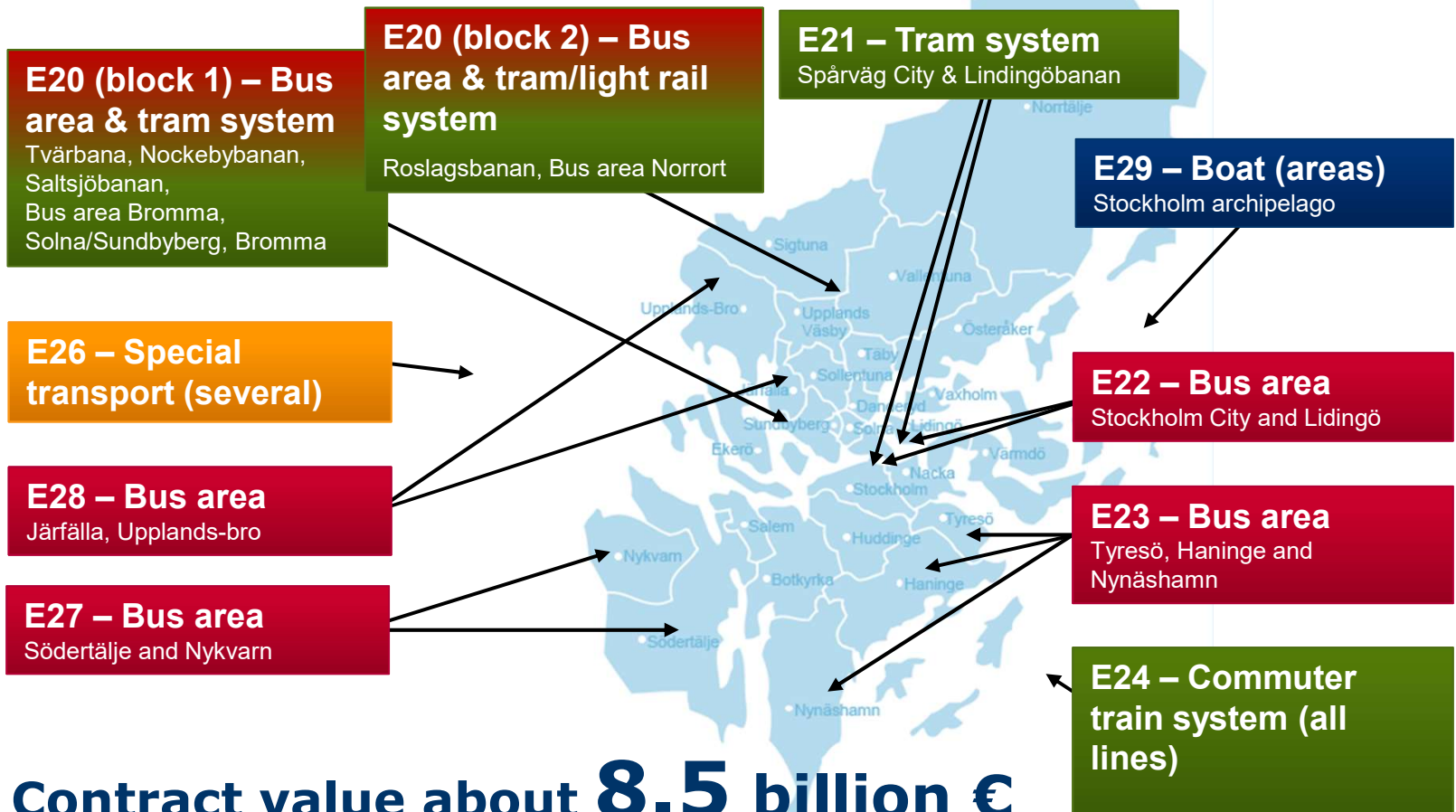
## We are a big procurement authority

- Volume: ~21 billion SEK
- Number of suppliers : ~1780
- Number of procurements: ~70
- 59% of all category spendency is for Traffic services





# Traffic operation contracts in "active business development" 2011-2016



Contract value about **8.5 billion €**  
total during the coming 10 years

# Traffic procurement process

- A traffic procurement takes about 1,5 years
- A traffic contract runs approximately 10-15 years

## Input

- Notice and PSO decision
- Experiences
- Pre-study

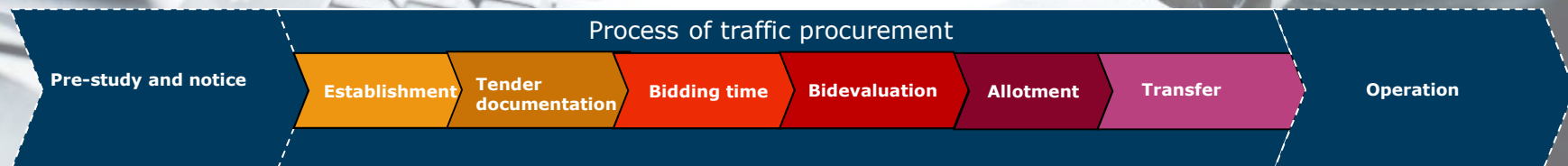
## Procurement process

## Output

- Contract
- Education
- Experiences

## Part deliveries

- Procurement decision
- Qualifying decision
- Tender documents
- Contract decision



# Dialogue with supplier market and bidders

- Strategic dialogue in-between renderings
- Pre-tendering dialogue
- Dialogue under tender process
- Follow up dialogue

Good quality  
on request  
for proposal



Good quality  
on bids



Business on  
good quality









## Special commitments

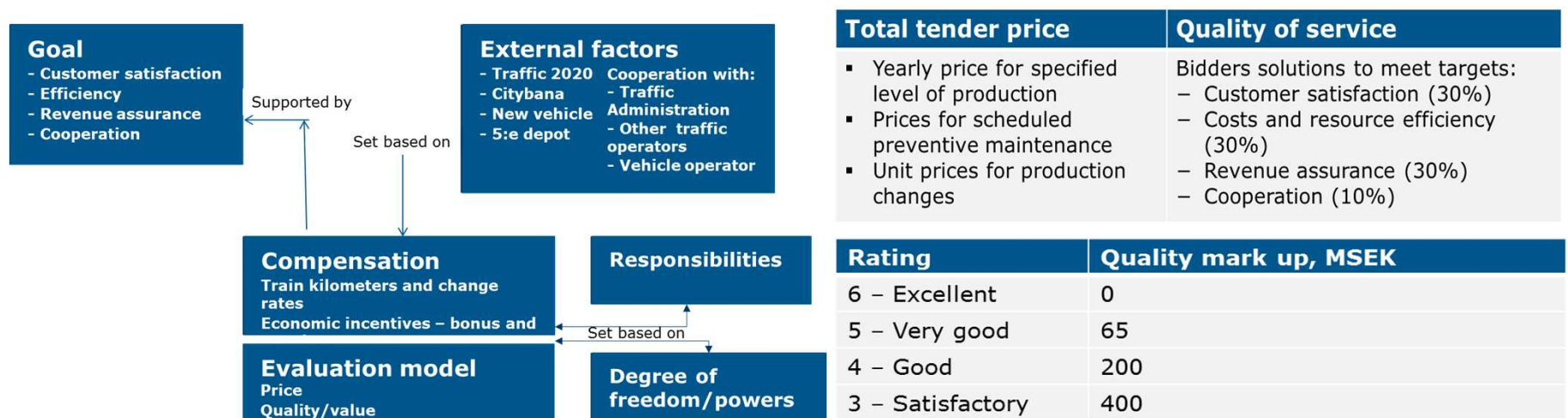
- The Transfer of staff
  - In accordance with Law on employment protection (national) shall the selected public service operator take over staff previously taken on to provide services
- Global Compact
  - The selected public service operator shall follow Global Compact rules and work in accordance with FN:s convention on the Rights of the Child
- Bank guarantee or guarantee from Parent company
  - The selected public service operator shall submit the bank guarantee or the guarantee from parent company for fulfillment of all commitments
- Collective agreements between social partners/labor conditions
  - Not decided yet. Rights to define a lowest level for salary, vacation and working hours



## Bid evaluation model (1 of 2)

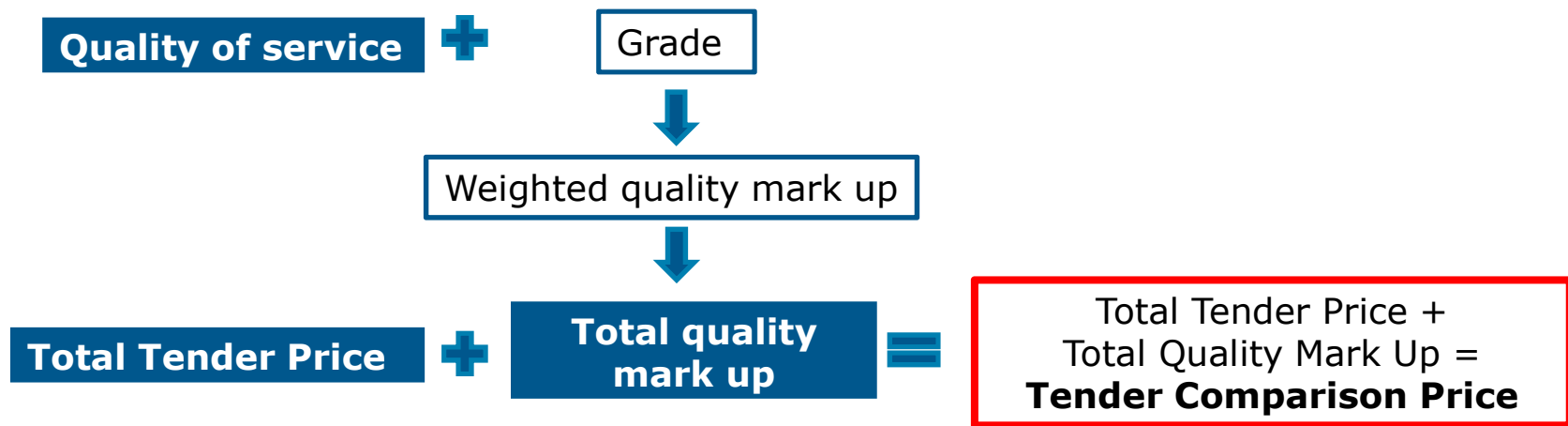
- Main principles
  - Evaluation of both tender price and quality of service
  - Selection of evaluation model (components/criteria) based on business model (usually connected to goal)
  - Markups on price for lack of quality (approximately 15% of sales of the year)

### Evaluation model Commuter train procurement



## Bid evaluation model (2 of 2)

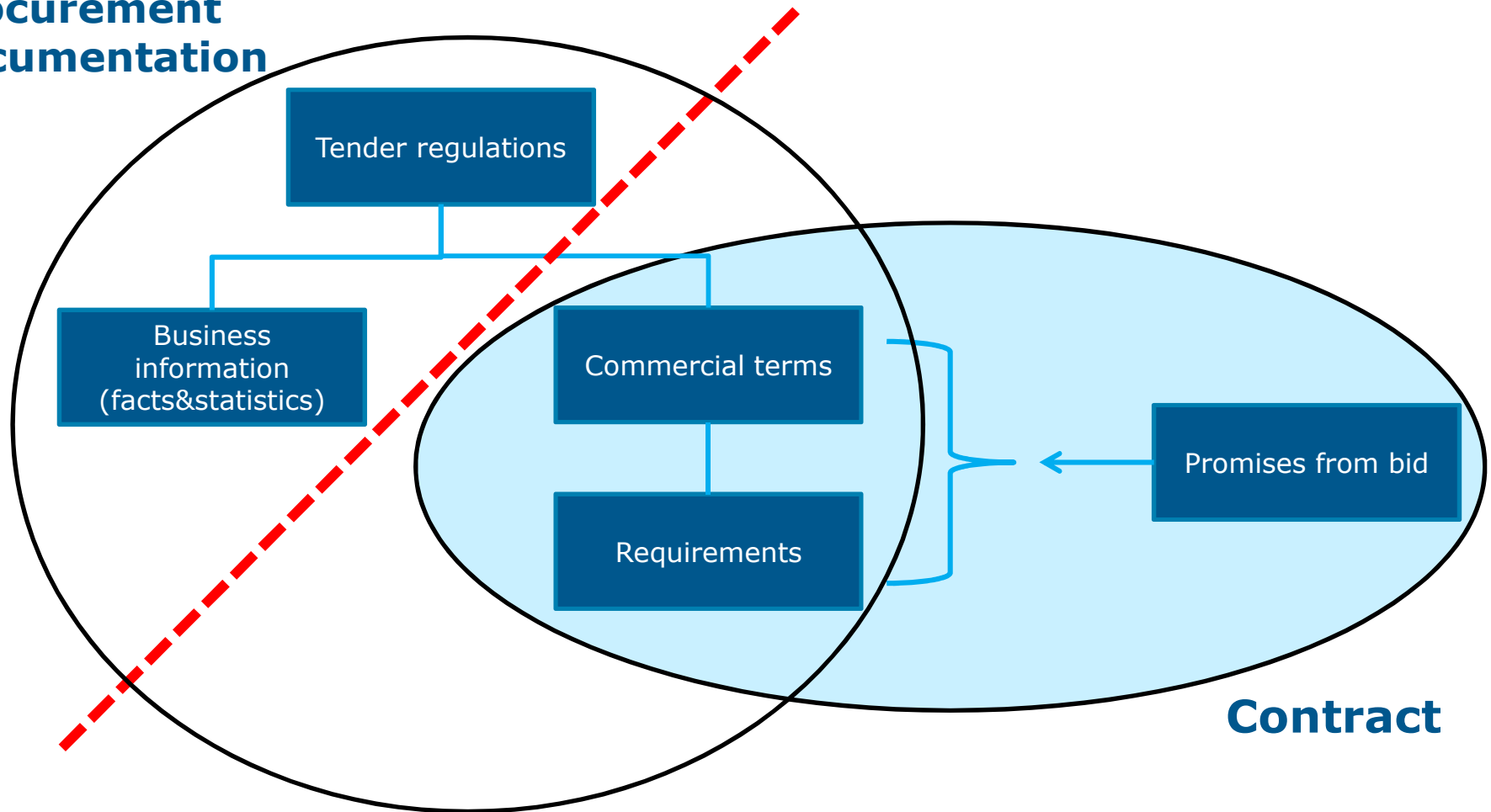
- Generation of Tender Comparison Price
  - The Total Quality Mark Up is added to the Total Tender Price resulting in a Tender Comparison Price
  - The tender with the lowest Tender Comparison Price is considered the financially most advantageous and will be awarded the contract





# From Procurement Documentation to Contract

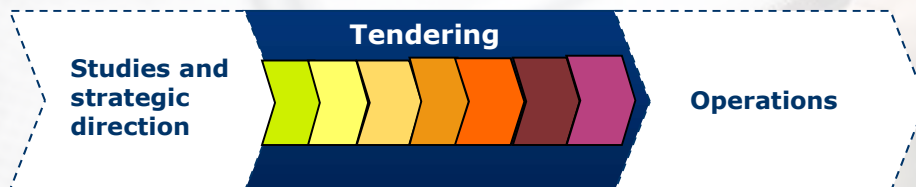
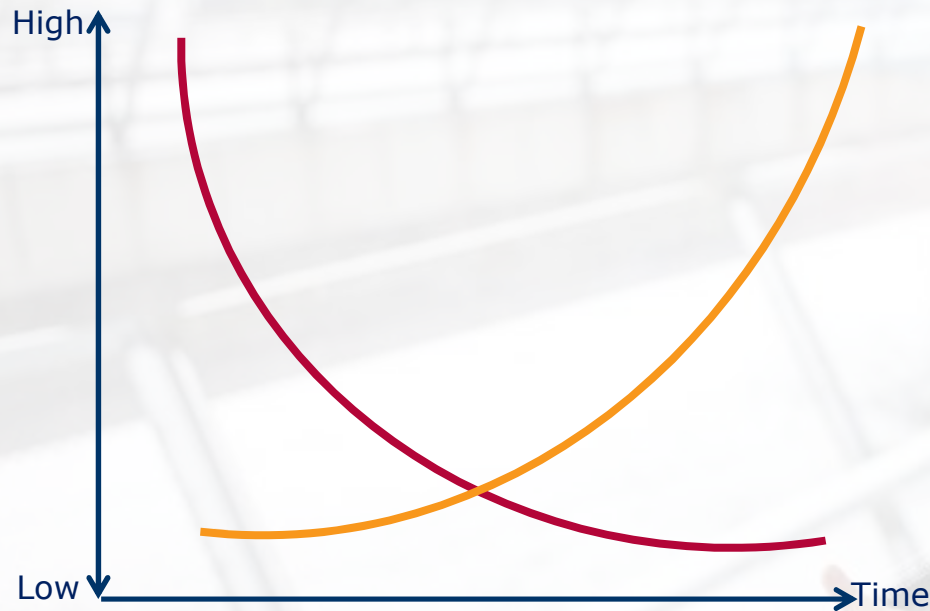
## Procurement documentation



# Put emphasis on the early stages

 Cost

 Possibility to influence the tendering result



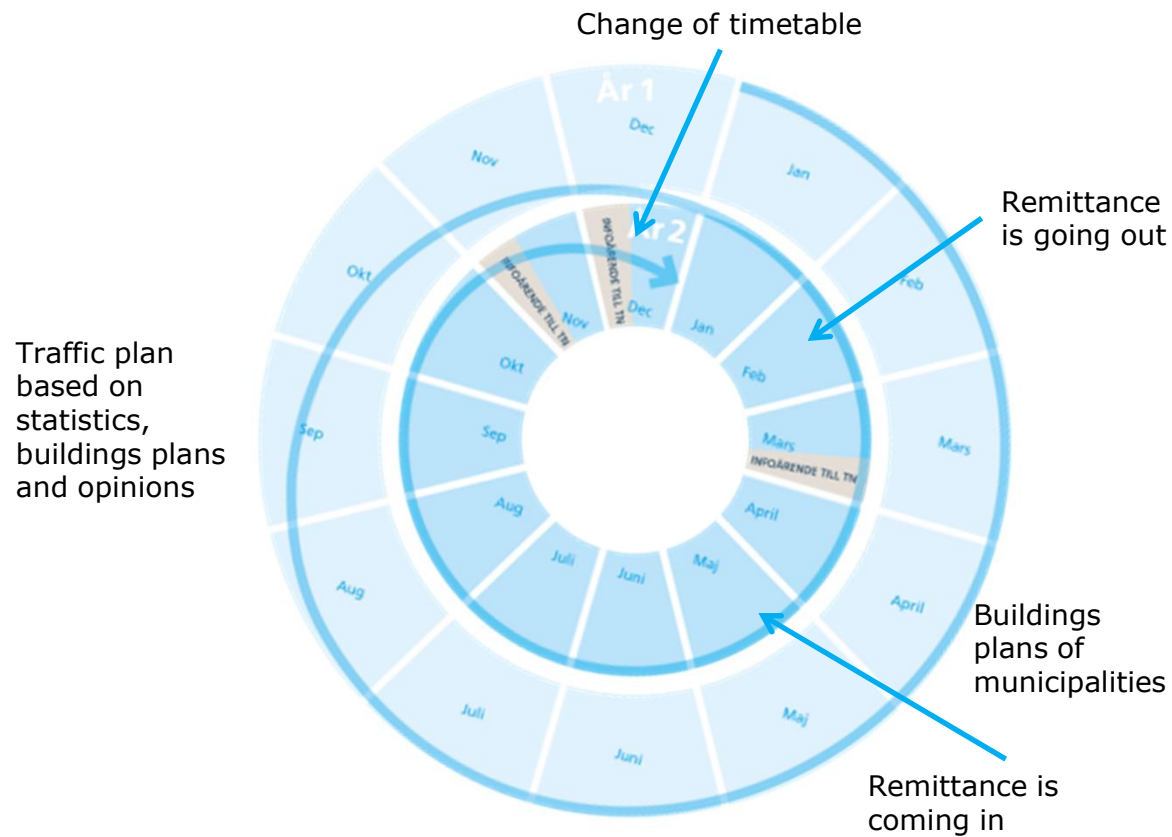
Procurement

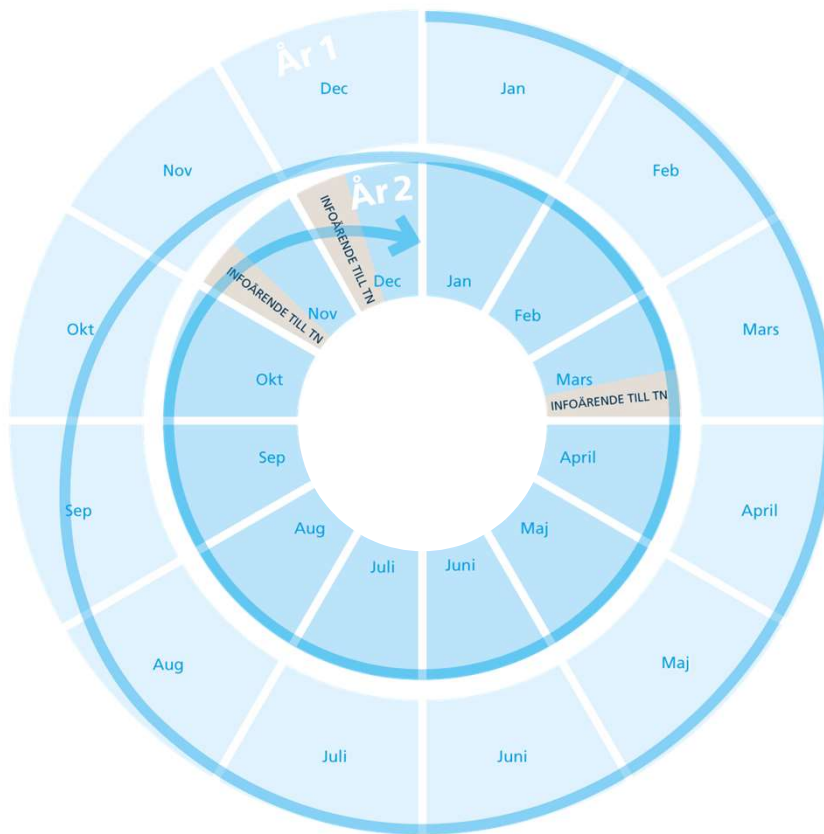
**TRAFFIC PLANNING**





# Traffic planning process





## År 1

### Våren

- TF genom SCB samlar in kommunala bebyggelseplaner

### September

- Samhällsplanerare lämnar över information om bebyggelseplaner till busstratger (SU)
- Busstratger lämnar över information om behov av förändrad trafik till TA bussplanerare

### Oktober (för trafikstart ca 14 månader senare)

TA bussplanerare lämnar över information till TU

- Trafikförvaltningen förser trafikutövaren med information om kommunala bebyggelseplaner

### Hösten

- Trafikutövaren /Trafikförvaltningen tar fram förslag på förändringar utifrån bl. a resandestatistik, kommunala bebyggelseplaner, strategier, synpunkter.

### December

- Trafikutövaren skickar förslag på förändringar till Trafikförvaltningen

## År 2

### Februari

- Trafikförvaltningen skickar remiss med trafikförändringsförslag till kommuner och organisationer för tillgänglighet.

### Maj

- Remissinstanserna lämnar remissvar till Trafikförvaltningen
- Trafikutövaren förser Trafikutövaren med remissvaren

### Juli

- Trafikförvaltningen skickar offertförfrågan till Trafikutövaren

### Augusti

- Trafikutövaren skickar offert till Trafikförvaltningen

### September

- Trafikförvaltningen beställer trafiken

### December

- Trafikstart för normaltidtabellen





# HOW TO DECIDE ON FIXED FARES, NEW TICKET CATEGORIES AND PRICES FOR SL-TRAVELERS?

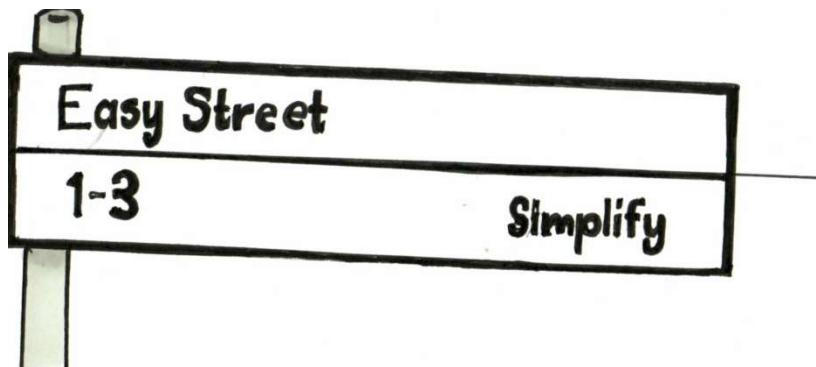
(MATS ELLMAN | MARKET STRATEGIST | SALES  
STOCKHOLM COUNTY COUNCIL | TRAFFIC DEPARTMENT)

# VISION AND GOALS



# A clear vision for the mission

- Vision
  - A ticket system that is characterized by simplicity and is easy to use



# Clear goals of the mission

- The traveler should experience that it is easy to use public transport
- More people will choose to use public transport
- A balanced economy



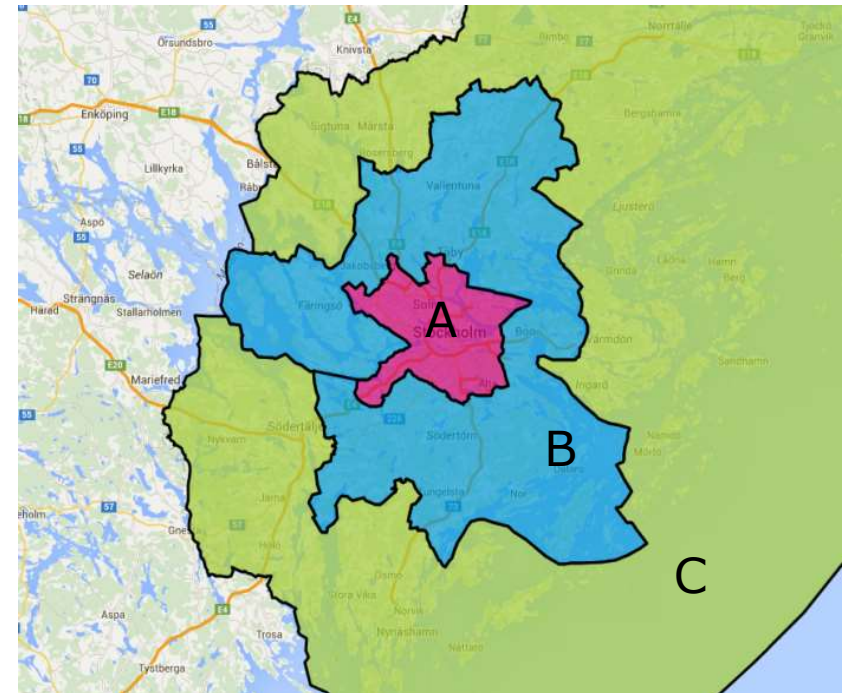
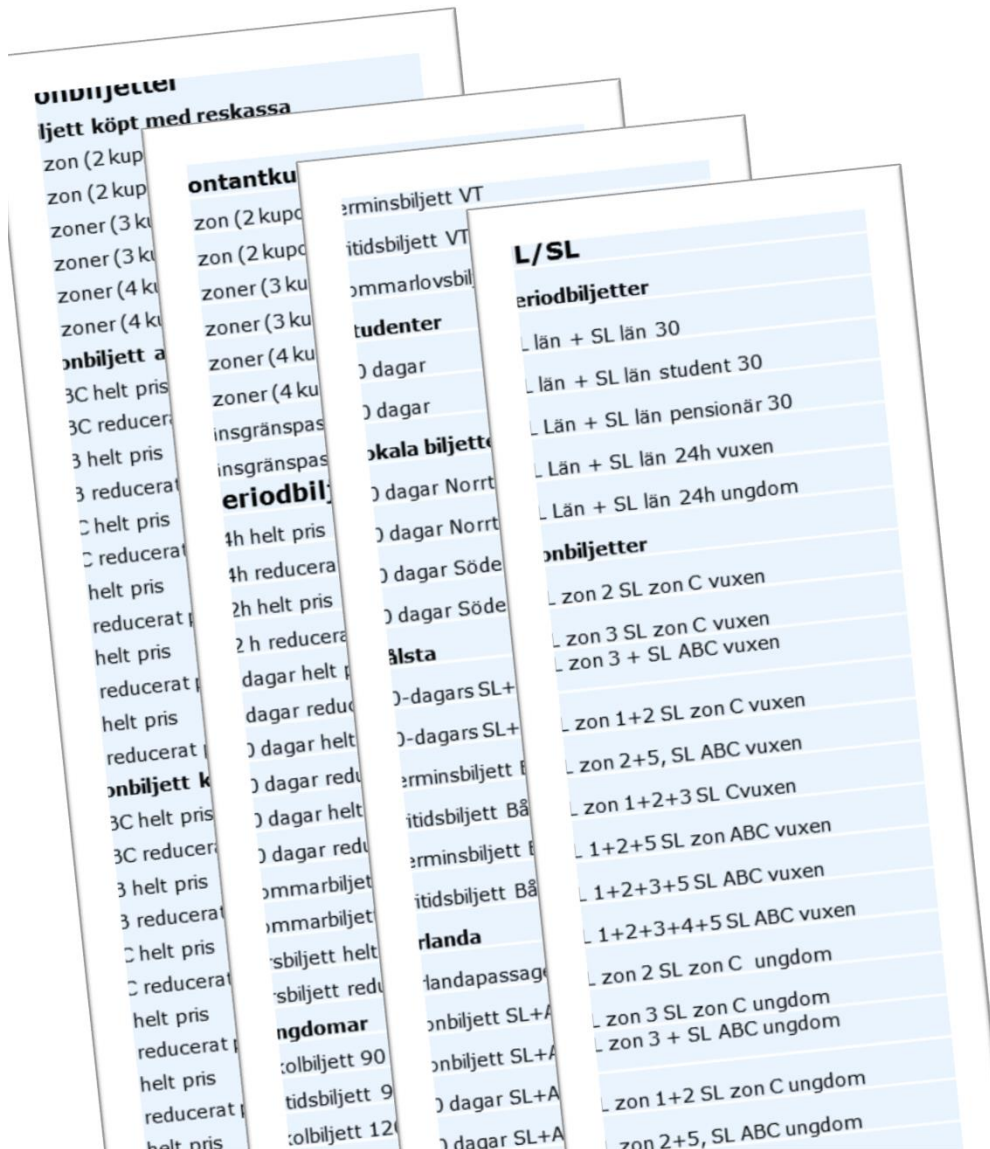
# **BACKGROUND, CHALLENGES AND KEY QUESTIONS**

# TODAY, SIMPLICITY IS MORE THAN A TREND, IT IS A NECESSITY !

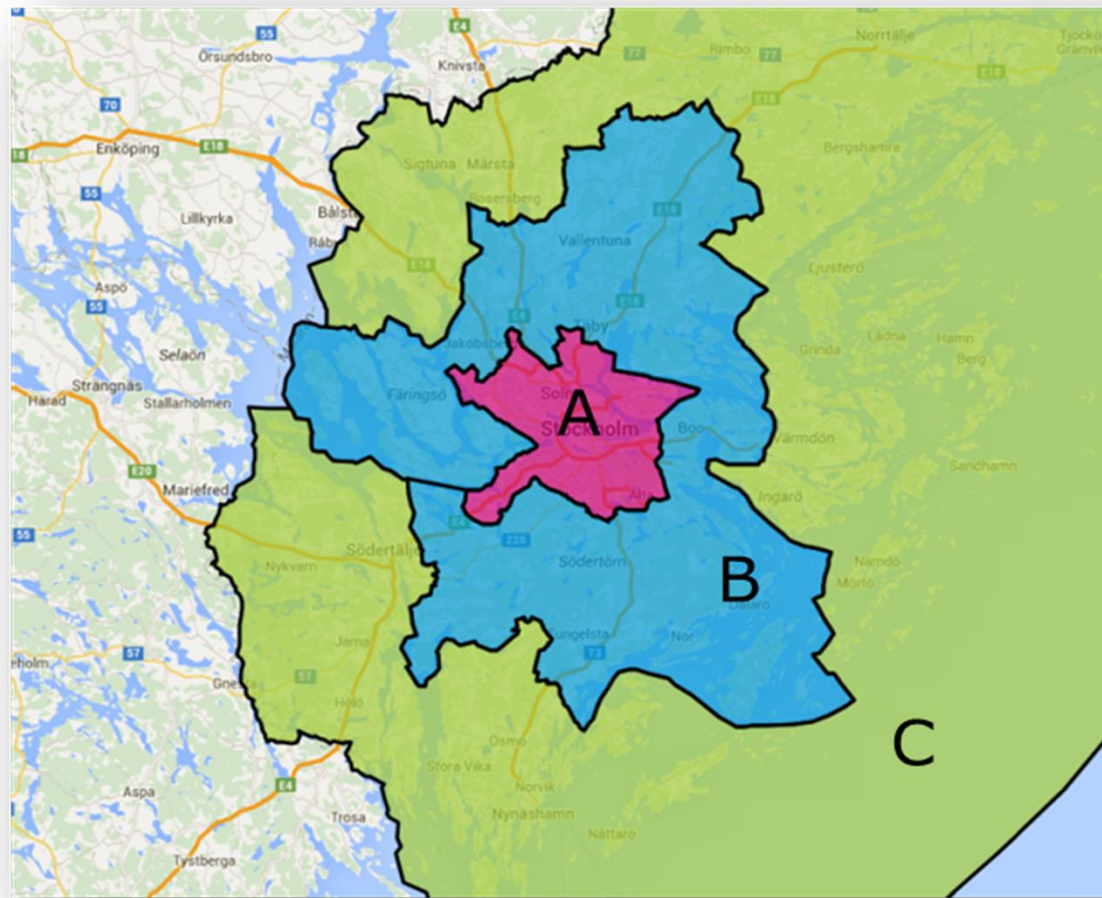
*As we are redefining our priorities and seeking to enjoy only the best of our experiences, it is necessary to eliminate daily stress and compensate the complexity of our modern lifestyles.*



# 100+ different tickets and 3 zones



# The “challenge” for single ride tickets

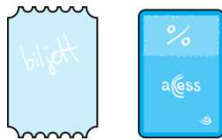




# Single ticket purchase in yesterdays system

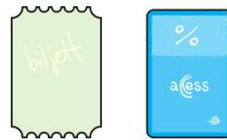
## SL Access ticket machine

- "Single ticket or 'purse'?"
- "Access card in the machine?"



## Ticket office

- "Is the ticket more expensive here?"
- "Can I pay with a credit card?"



- Where am I travelling?
- Which zone is it?
- What kind of ticket?
- Full or reduced price?
- Where should I buy the ticket?
- Do I earn anything by using 'purse'?

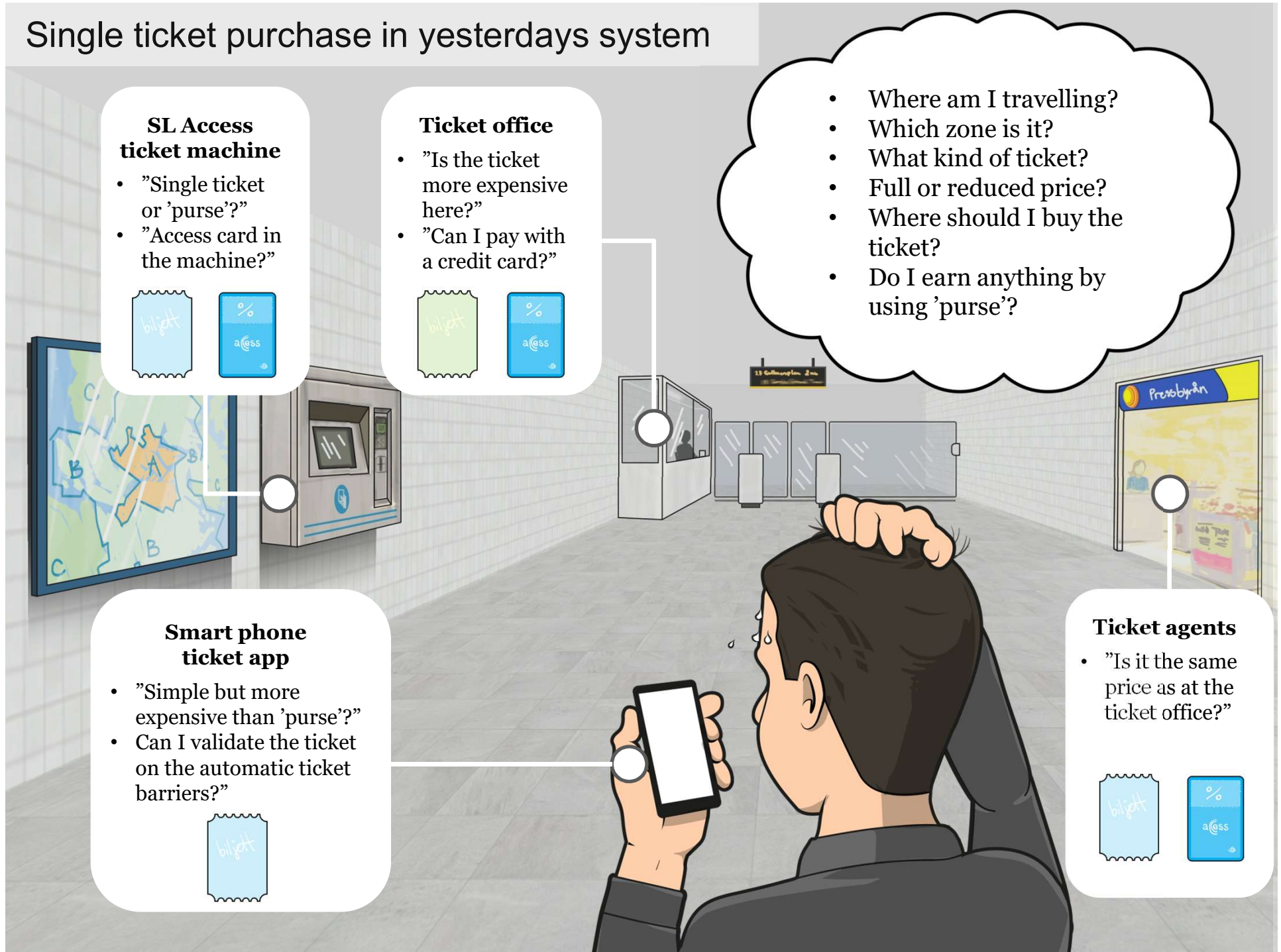
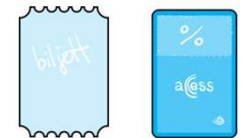
## Smart phone ticket app

- "Simple but more expensive than 'purse'?"
- Can I validate the ticket on the automatic ticket barriers?"



## Ticket agents

- "Is it the same price as at the ticket office?"





# THE STUDY

# Parliamentary study -> 2015-2016

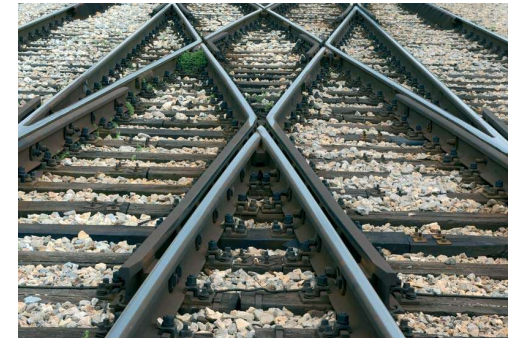
## The scope

- Fare collection system
  - Zones or no zones?
  - Distance?
  - Time?
  - Traffic modes (two different today; sea vs land)
  - ... as well as validation systems (open, check in, check in/check out)
- Price levels and effects
- Price logics, rebate structures etc.
- Ticket systems & Payment systems



## Two main tracks in the scope

- What is possible to do?
  - Improve the current fare system
    - Flexible zones
    - Offer season tickets for different zones
    - Check-in / Check-out as a method for validation
    - Improved information and technical support
  - Adopt and inset a flat rate for single journey tickets



**The results of our studies concluded that the introduction of a flat rate is that which has the greatest impact for the traveler**



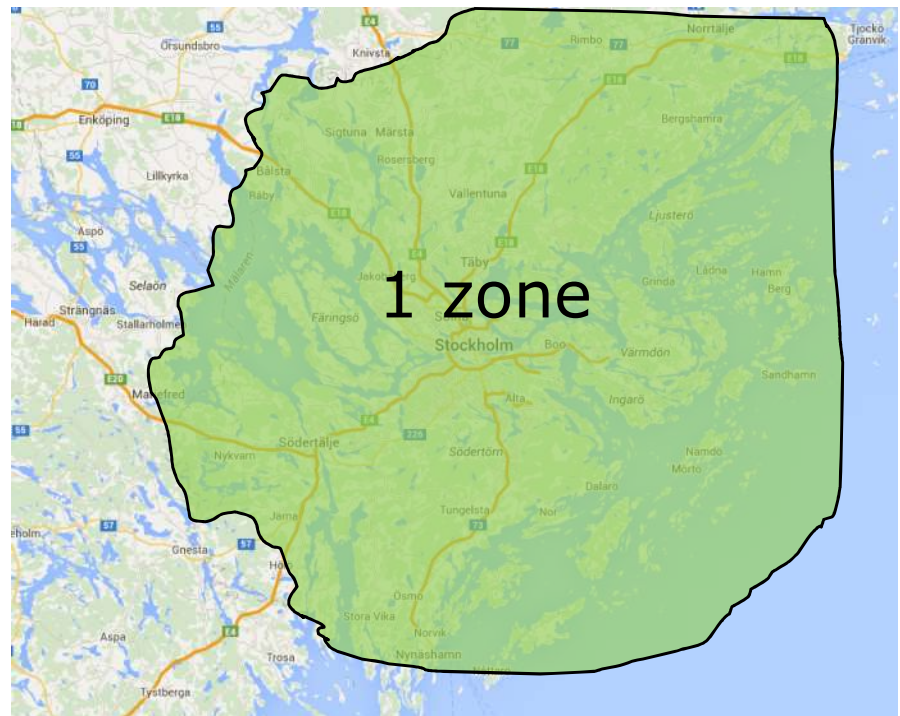
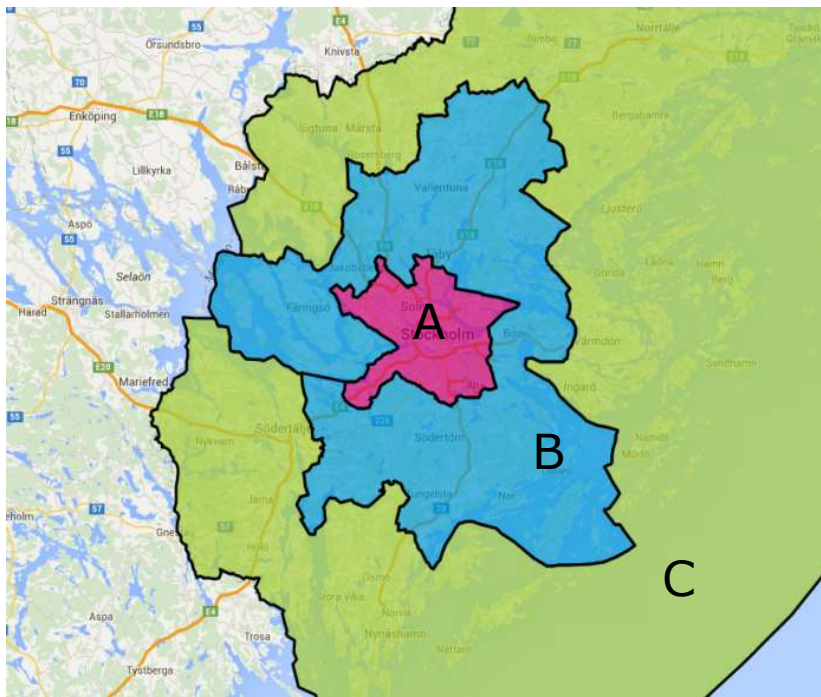
## How did we do it?

- Asked the customer
- Investigated and asked other PTA's
- Calculating fares and risk
- Analyzed and presented the different alternatives
- Kept the politicians in the loop



# THE RESULTS

# The solution for all ticket types...



# The customer perspective

## "A simple journey"

*Customer's choice of ticket - "Yesterday"*



*Customer's choice of ticket - Today!*





## Prices before and after introduction of one zone fare and price adjustments (examples)

Tickets paid with "reskassa" (travelpurse)		New price
1 zone	25,00 SEK	30,00 SEK
2 zone	32,50 SEK	
3 zone	50,00 SEK	

Tickets bought in the app, from a vendor or at vending machine		New price
1 zone	36,00 SEK	43,00 SEK
2 zone	54,00 SEK	
3 zone	72,00 SEK	

Approx. 2-3 SEK are the effects of a flat rate, additional adjustment of the price depends on the price increase

## Prices before and after introduction of one zone fare and price adjustments (examples)

	2016	2017
<b>Travel purse 1 zone</b>	<i>Zone based rate*)</i>	<i>Flat rate*)</i>
Adult	25 SEK	30 SEK
Discounted	15 SEK	20 SEK
<b>Single ride ticket 1 zone</b>	<i>Zone based rate</i>	<i>Flat rate*)</i>
Adult	36 SEK	43 SEK
Discounted	20 SEK	29 SEK
<b>Monthly pass 30 days.</b>	<i>Flat rate*)</i>	<i>Flat rate*)</i>
Adult	790 SEK	830 SEK
Discounted	490 SEK	550 SEK

\*) Same price applies regardless of the sales channel, except if ticket is bought from conductor

# ***1. Ticket fare reductions for specific groups of society.***

- *What is the system of fare reductions in Sweden like?*
  - *They are different in every county and commercial operators make their own rules that can be changed without further notice. In Stockholm County youths <20, adult students, elderly >65 years and people receiving pension are in title to reduced fares*
- *Which groups of society can use public transport for free or receive ticket price reduction?*
  - *No groups are in title to use public transport for free, except kids <7/12 years in company of some one who is paying for a ticket. Groups that are in title to special transport (elderly, disabled etc.) can use the public transport without extra cost.*
- *Do municipalities offer their own ticket price reductions in public transport or are the all fare reductions regulated from national government?*
  - *There are no nation government who decides about fares or the reductions, neither generally the municipalities as public transport are organized in counties witch typically consist of several municipalities*
- *How do public transport authorities count people using fare reductions and who compensates reduced prices to public transport operators?*
  - *The operators in Stockholm county receives the same compensation regardless who is travelling*
- *Which institutions are in charge for controlling the whole system?*
  - *The board of the county counsel, the transport administration and the government all depending of the matter/subject.*

## ***2. Ticket revenue collection.***

- *Do all revenue from public transport tickets is possession of public transport authority or do they belong to public transport operators? If all revenue goes to PTA, what is the system like, how they are distributed to public transport operators?*
  - *In Stockholm the revenues belongs to the PTA. The operators receives compensation according to the contract.*
    - *A part of the contract could be based of the number of paying passenger as an incentive model.*



### ***3. Ticketing system maintenance.***

- *This question is about the maintenance costs of a given public transport ticketing system. How is it in Västtrafik? If one counts, how large is the share from every sold ticket, which goes to maintenance costs of the ticketing system?*
  - *In Stockholm it all depends through which sales channel that have been used.*
    - *We monitor fixed and variable costs.*
      - *Fixed costs vary between 0,00%-2,50%*
      - *Variable costs vary between 1,00%-15,30%*
      - *The majority of the tickets are sold at a cost of approx 3,00%*

# Vision

**"An attractive, sustainable and growing Stockholm region with the freedom of citizens to shape their own lives and make critical decisions"**



*Thank you!*

*iveta.sandstrom@sll.se*