



Israel FastLane (HOT Lane) Changes in Demand, Modal Split, and the Factors Behind Them

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The Fast Lane – Major Features

- **Cost of usage (Toll)** – it is a variable toll, dependent on lane occupancy, ranging between \$1.9 to \$27.9 (between \$0.2 and \$3.5 per mile).
- **Free usage for HOV** – depending on the time of day, it can be 3 people or 4 people (including the driver) – i.e. buses and minibuses are free for use.
- Has **electronic signs** displaying the current cost of using the lane, and the LOS of Highway No. 1 (Jerusalem – Tel Aviv Highway), its main competitor, which is not tolled.
- **Dedicated parking facility** about halfway into the lane (close to Shappirim Interchange). Is expected to be doubled in the short term.

Parking Facilities and Shuttle Rides

- Has about 2,000 parking spaces, is expected to be doubled in the short-term.
- Parking is free for non-overnight parking (to prevent long term parking due to its proximity to Ben Gurion International airport).
- The parking facilities are accompanied by 2 free-of-charge shuttle rides to central locations in Tel Aviv:
 - ▶ The Kirya line – close to the CBD, Azrieli Towers and government complexes.
 - ▶ The Bursa line – close to the Diamond Exchange, with many legal offices, venture capital, and consulting firms.
 - ▶ New line planned – Rothschild Line – in the heart of the Tel Aviv banking and financial center.

Parking Facilities and Shuttle Rides

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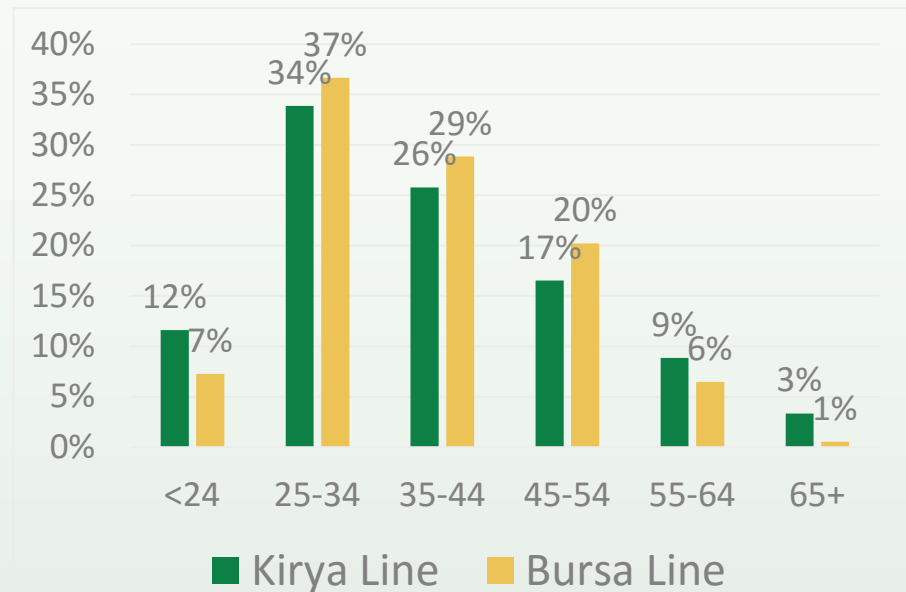
- The shuttles are operational between Sunday and Thursday, from 6:30 AM to 11 PM. They do not operate on holidays and holiday eves.
- During Peak Periods the frequency of the shuttle rides are every 5 minutes. At other times of the working day – 15 minutes (or until the shuttle is filled).
- Parking facility is almost packed on weekdays.
- Most times these shuttle buses are full-scale 50-seater buses (especially the Kirya line). The rest are 15-seater mini-buses.

Shuttle Bus Ride Survey – 2013, 2016

- The survey was conducted on 3 working days in March 2013 and March 2016, 587 people in 2013, 890 in 2016 - increase of more than 50% over 3 years

- Demographics (2016)
 - ▶ Vast majority of users between ages 25 and 44
 - ▶ Gender Distribution 55% (women) – 45% (men)
 - ▶ Used by people of all ages
 - ▶ No major changes from 2013

Age Distribution



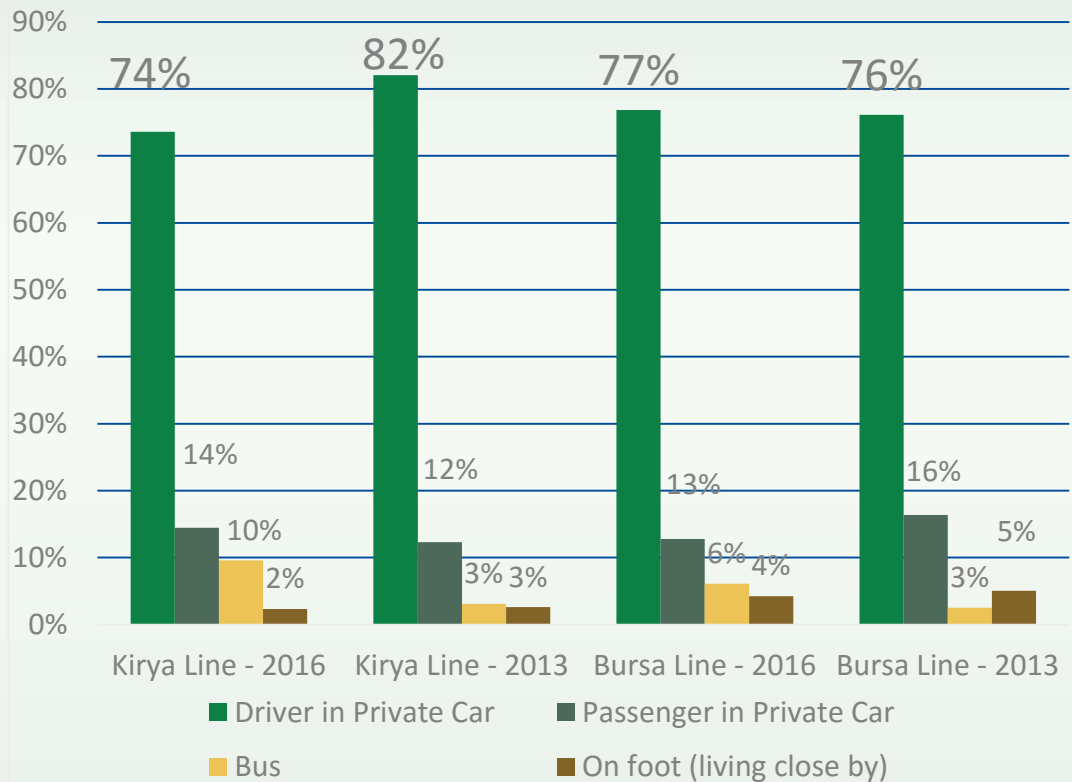
Shuttle Bus Ridership vs Employment Distribution

- The age distribution in the shuttle ridership is dissimilar between ages 25-34
- The older you get, the less propensity you have to ride the shuttle buses

Age Group	% in Shuttle Rides – Trip purpose HBW, OTC	% Employment in Tel Aviv
<24	9%	9%
25-34	35%	27%
35-44	27%	24%
45-54	18%	22%
55+	11%	18%

Mode Transfer to Shuttle Rides

- The vast majority of people using the shuttle rides were either drivers of private vehicles or passengers (between 74% and 82%). Change in Kirya Line due to higher Jerusalem participation.
- Higher bus usage due to 2 new lines that go to the park-and-ride (primarily an increase in users from Jerusalem)

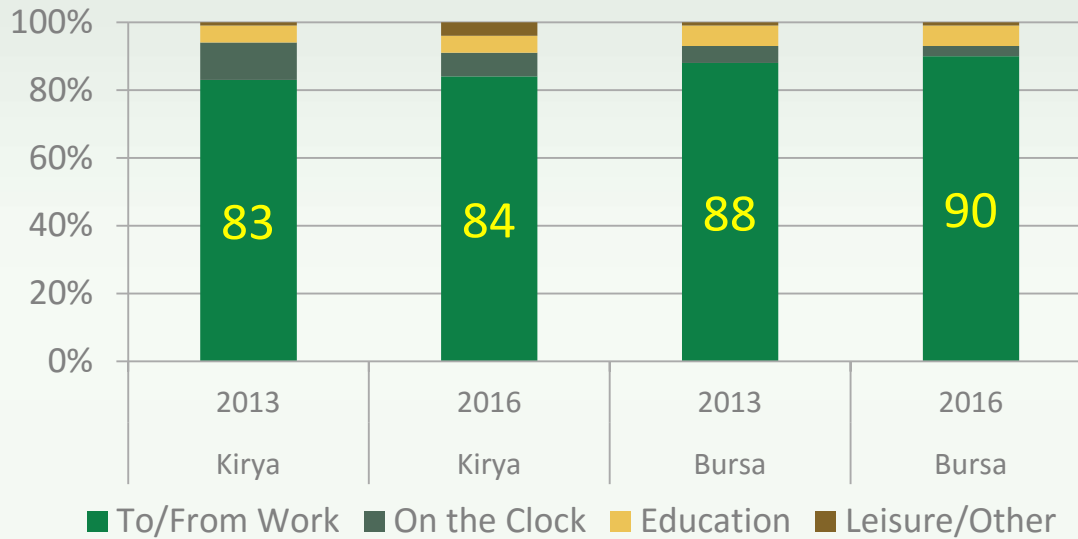


Shuttle Ride to Destination – which mode?

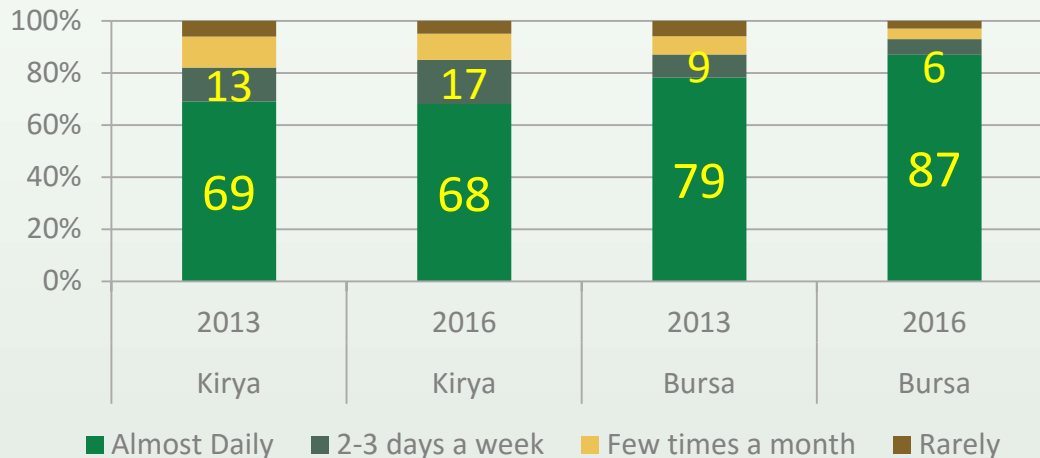
- Almost all the people who use the shuttle rides get to their final destination by foot.
- Kirya line has slightly higher propensity for taking a bus because it is closer to other parts of CBD

Final Mode	Kirya Line	Bursa Line
Foot	84%	90%
Bus	11%	7%
Taxi	Less than 0.5%	1%
Other	5%	2%

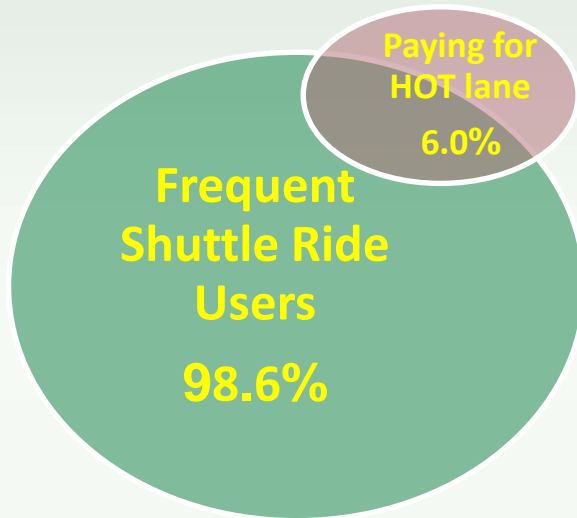
Trip Purpose for Shuttle-Bus Users



- Vast majority – to/from work on an almost daily basis
- Increasing in almost all cases over time



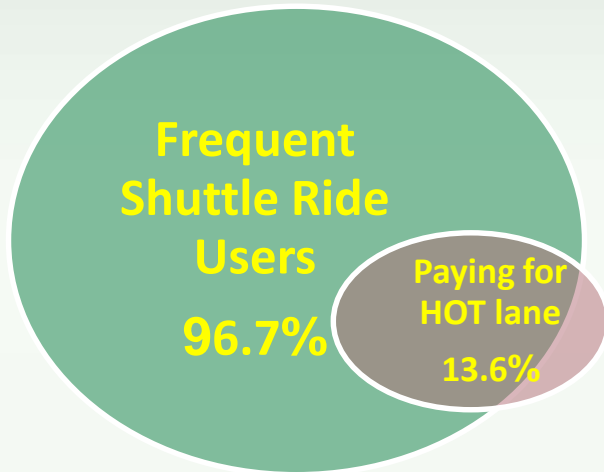
Shuttle and HOT Lane Usage Bursa Line



- **Some** of the frequent shuttle ride users do use and pay for the HOT lane (5.3%)

Shuttle Bus Usage	HOT Lane Usage		
	Paying for HOT Lane	Did Not Pay	Total
Frequent	5.3%	93.3%	98.6%
Rarely	0.7%	0.7%	1.4%
Total	6.0%	94.0%	100%

Shuttle and HOT Lane Usage Kirya Line

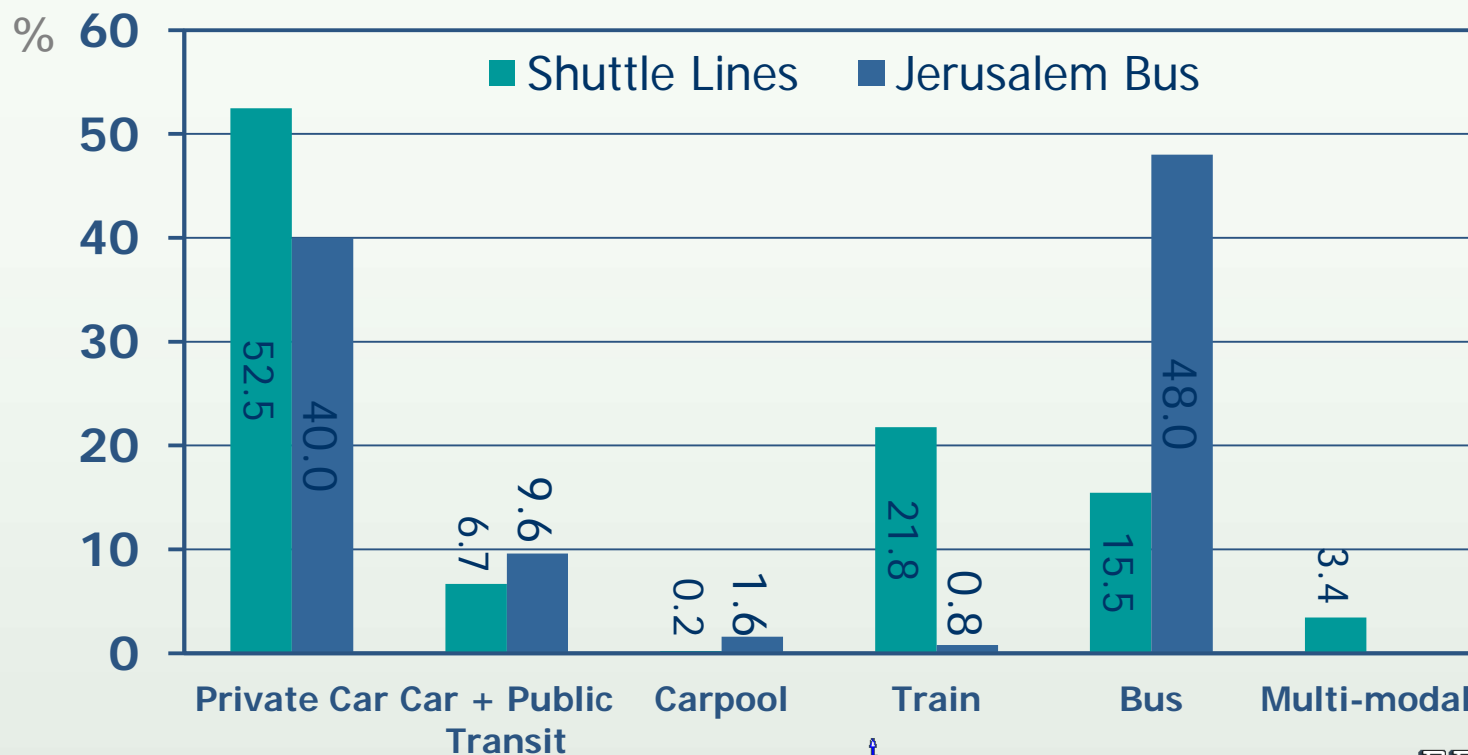


- **Some of the frequent shuttle ride users do use and pay for the HOT lane (12.5%) – more than double that of Bursa Line**

Shuttle Bus Usage	HOT Lane Usage		
	Paying for HOT Lane	Did Not Pay	Total
Frequent	12.5%	84.2%	96.7%
Rarely	1.1%	2.2%	3.3%
Total	13.6%	86.4%	100%

Modal Split Prior to Fast Lane and Shuttle Ride Existence

- More than 50% of the shuttle ride users, previously used their private cars to get to their destination (40% on the Jerusalem bus)



Changes in Modal Split

- The two survey's results show that:
 - ▶ Most of the passengers on the shuttles bus originally used their cars (i.e. less vehicles on the road, less congestion). Most people getting off the shuttle stations go by foot to their destination.
 - ▶ The vast majority of the shuttle bus users do so for getting to and from work.
 - ▶ Most of the people using the shuttles do so on an almost-daily basis – i.e. this change is permanent.
 - ▶ Small portion of the same users who use the shuttle rides also use the HOT lane itself

HOT Lane Users

- Over of a period of one year, we found the following about the HOT lane users:
 - ▶ The majority use it once a month (56%) – it is not a daily ride for them (cost)
 - ▶ Only 6% use it more than two workweeks a month
 - ▶ Means – it might be a spur-of-the-moment decision for them
 - ▶ What does this mean for Value of Time?

Conclusions

- Managed lane with dedicated parking and free shuttle ride – first of its kind. Was conceived as a PPP project.
- People changed their transportation mode as a result of the park and free shuttle – lessened congestion into Tel Aviv (estimated savings of about 2,500 hours daily).
- Based on the survey data and national census data, about 20%-25% of the vehicle owners, who work in Tel Aviv, and whose destination is in the close proximity of the shuttle rides, utilize the shuttle, thus lessening congestion.
- Was conceived as a bus priority lane into Tel Aviv and “selling capacity” to non-HOVs. This “sold capacity” created a revenue stream which funds the free shuttle rides.
- Is being considered for 5-6 additional locations in Israel.



Thank You!

For more information

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