Managed Lanes and the Park-and-Ride Shuttle to Tel Aviv, Israel

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Introduction – the Fast Lane

- The fast lane is a separated, managed lane, (with acceleration lanes at two points) extending from Ben Gurion International Airport to the Ayalon Freeway, at the entrance to Tel Aviv, the major economic and financial center of Israel.
- It is about 8 miles (13 kilometers) long, and was opened on January 7th, 2011.
- It is the first project of its kind in Israel and the only project whose toll subsidizes 2 free shuttle lines from a dedicated parking facility to Tel Aviv.



The Fast Lane – Major Features

- Cost of usage (Toll) it is a variable toll, dependent on lane occupancy, ranging between \$2.3 to \$24.3 (between \$0.3 and \$3.0 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).





Parking Facilities and Shuttle Rides

- Has about 2,000 parking spaces.
- 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.
- Bus line from the parking facilities to Jerusalem.





Parking Facilities and Shuttle Rides

(cont.)

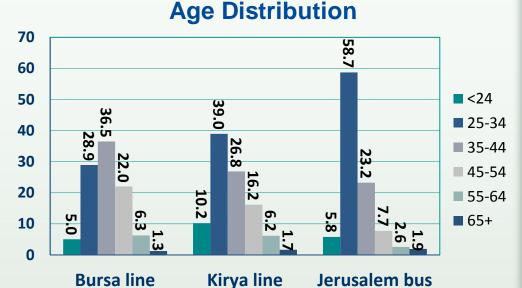
- The shuttles are operational between Sunday and Thursday, from 6:30 AM to 11 PM. They do not operate on holidays and holiday eves.
- During Peak Periods the frequency of the shuttle rides are every 5 minutes. At other times of the working day – 15 minutes (or until the shuttle is filled).
- The Jerusalem bus operates every half hour during non-peak times and every 20 minutes at peak times.
- Shuttles are free-of-charge, Jerusalem bus costs about \$4 each way.





Shuttle and Jerusalem Bus Ride Survey

- The survey was conducted on 3 working days in March 2013, and encompassed 769 people – 587 on the shuttle rides, and 182 on the bus to Jerusalem (approximate sample size of 19%, based on average monthly working day parking data).
- Demographics
 - Vast majority of users between ages 25 and 44
 - Gender Distribution 60% (males) – 40% (females)
 - Used by people of all ages







Parking Facility Statistics

	Parking Spaces Utilized			
	Number of Vehicles on Working Days		As % of Total Available Parking	
	Monthly Avg	Max	Monthly Avg	Max
2011	911	1,358	46%	68%
2012	1,376	1,797	69%	90%
2013*	1,466	1,753	73%	88%

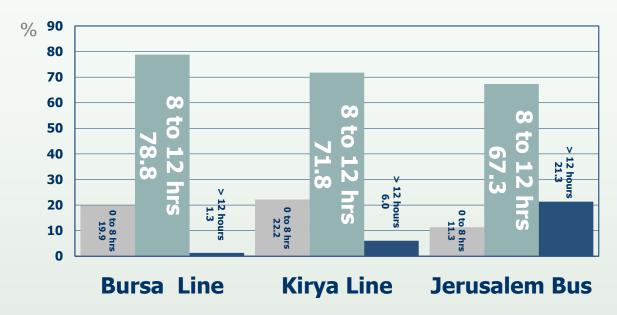
^{*} Data was available for Jan-Sep only. In the last week of December the parking facilities were almost full (maybe 50 spaces available)





Number of Hours Parked

- The vast majority of the interviewed shuttle users park at the facility between 8-12 hours a day
- Hours largely correspond with the regular working hours (9-5, 9-6)







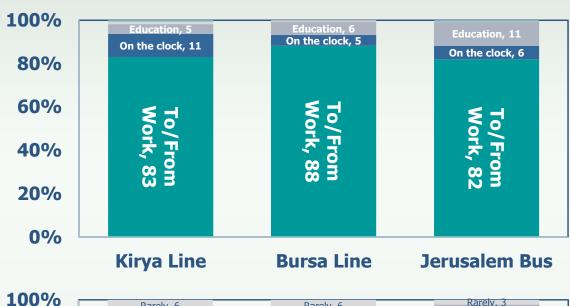
Changes in Modal Split

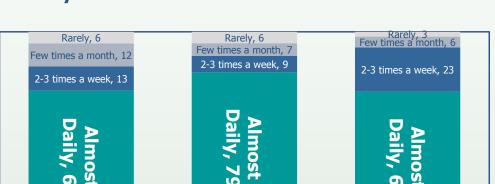
- The survey's results show that:
 - Most of the passengers on the shuttles and the Jerusalem bus originally used their cars (i.e. less vehicles on the road, less congestion). Most people getting off the shuttle stations go by foot to their destination.
 - ► The vast majority of the shuttle bus users do so for getting to and from work.
 - Most of the people using the shuttles do so on an almostdaily basis – i.e. this change is permanent.





Trip Purpose for Shuttle/Bus Users





Bursa Line

- Vast majority to/from work on an almost daily basis
 - Jerusalem bus has slightly more education (school) trip purpose due to proximity to the Hebrew University



Kirya Line

80%

60%

40%

20%

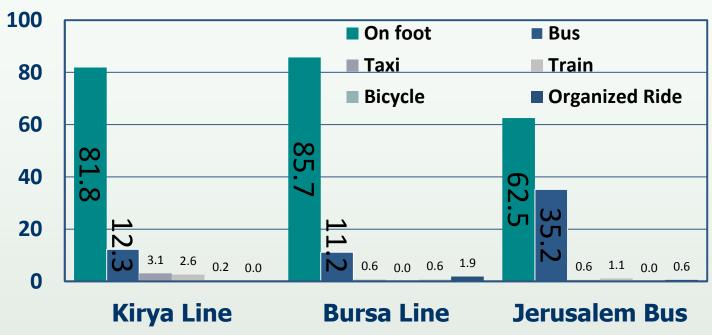
0%



Jerusalem Bus

Transport Mode to Destination

Most of the shuttle ride and bus users go to their destination by foot once they get off the shuttle bus (between 82% and 86%)

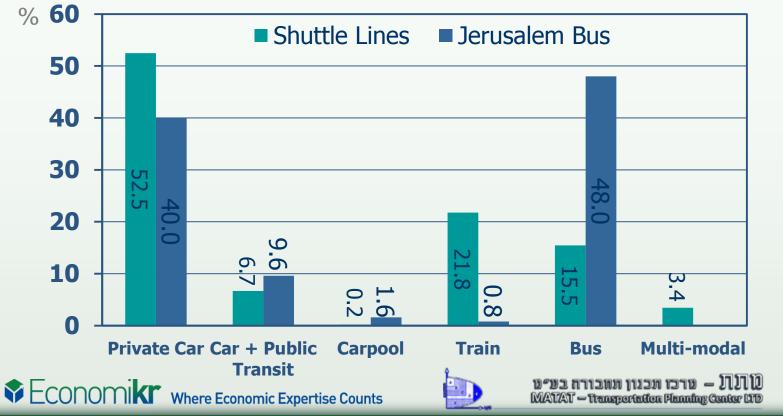






Modal Split Prior to Fast Lane and Shuttle Ride Existence

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



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% 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 2-3 additional locations in Israel.





Thank You!

For more information

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