

Nantucket Park and Ride Study Report Findings February 1, 2010



Elements of A Park and Ride Operation

- **Passengers**
- **Parking**
- **Schedule**
- **Bus Route and Stops**
- **Shuttle Buses**
- **Cost**

Daily Ferry Passengers

- Summer (6/20 to 9/1)
 - 4,900 per weekday
 - 6,700 per weekend day
- Peak Summer (7/6 to 8/23)
 - 5,000 per weekday
 - 7,200 per weekend day
- Shoulder Period (4/20 to 6/19 and 9/2 to 10/26)
 - 2,600 per weekday
 - 3,000 per weekend day

Potential Daily Park and Ride Passengers – Peak Summer

- Peak Summer (7/6 to 8/23)
 - 5,000 per weekday
 - 7,200 per weekend day
- ReMain Survey – 38% of ferry passengers use private vehicles for transport to/from wharfs.
- ReMain Survey – 25% might be interested in a PAR Service
- Estimated PAR passengers
 - 500 per weekday
 - 700 per weekend day



Elements of A Park and Ride Operation

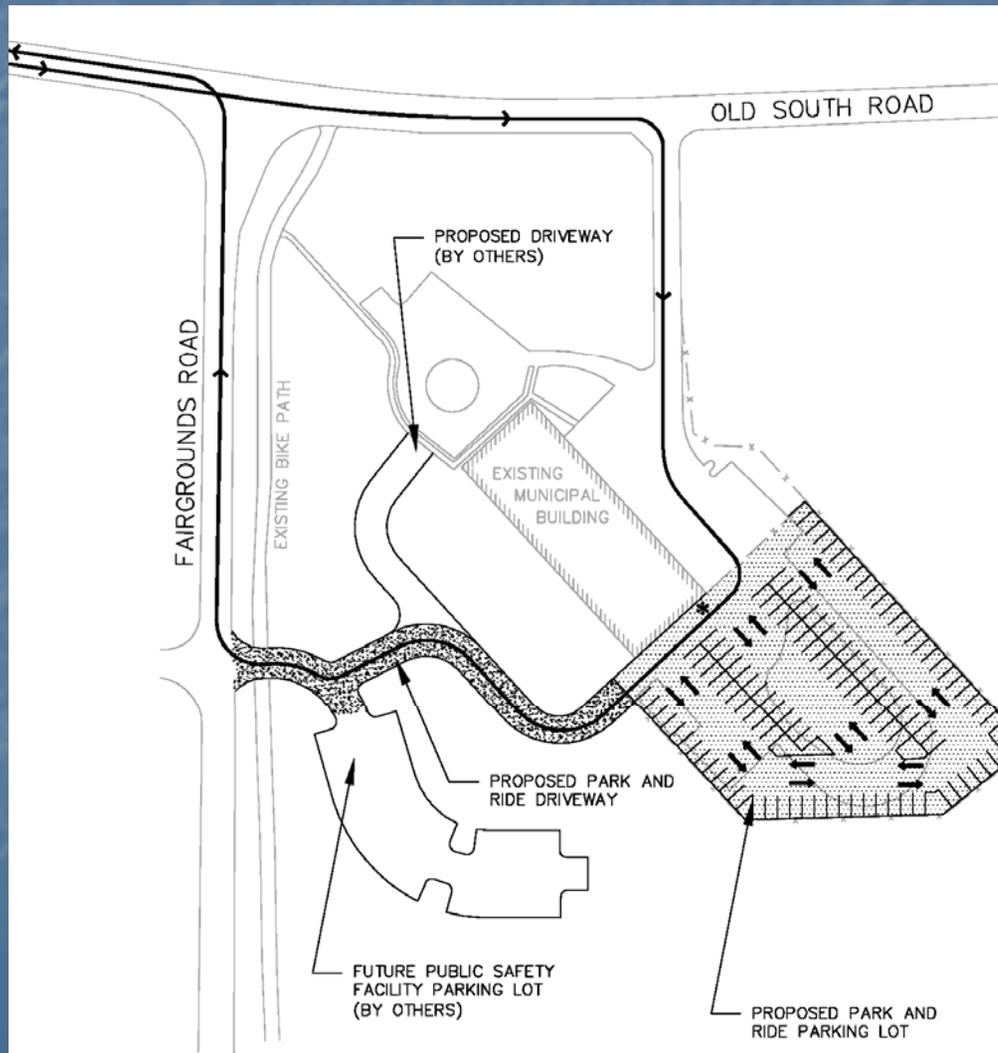
- Passengers
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Satellite Parking

- Requirements
 - 140 spaces on weekdays
 - 210 spaces on weekends
- Two Fairground Road
 - 110 spaces (temporary)
 - 132 spaces on weekdays and 298 spaces on weekends (permanent) – Kaestle Boos Plan
- Nantucket Elementary School
 - 110 spaces (Summer Only)



Two Fairgrounds Road – Conceptual Plan of Temporary Parking Lot



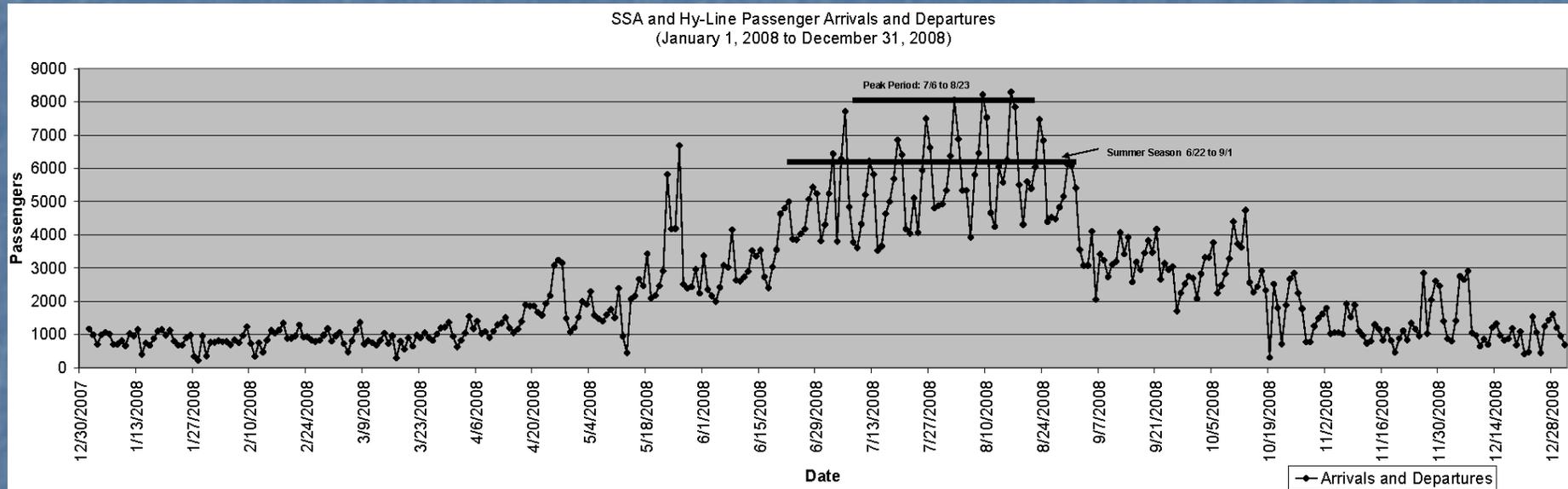
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System Schedule



- Summer Season – June 20th to September 6th (79 days)
- Shoulder Season – April 20th to June 19th and September 7th to October 26th (111 days)

Bus Schedule

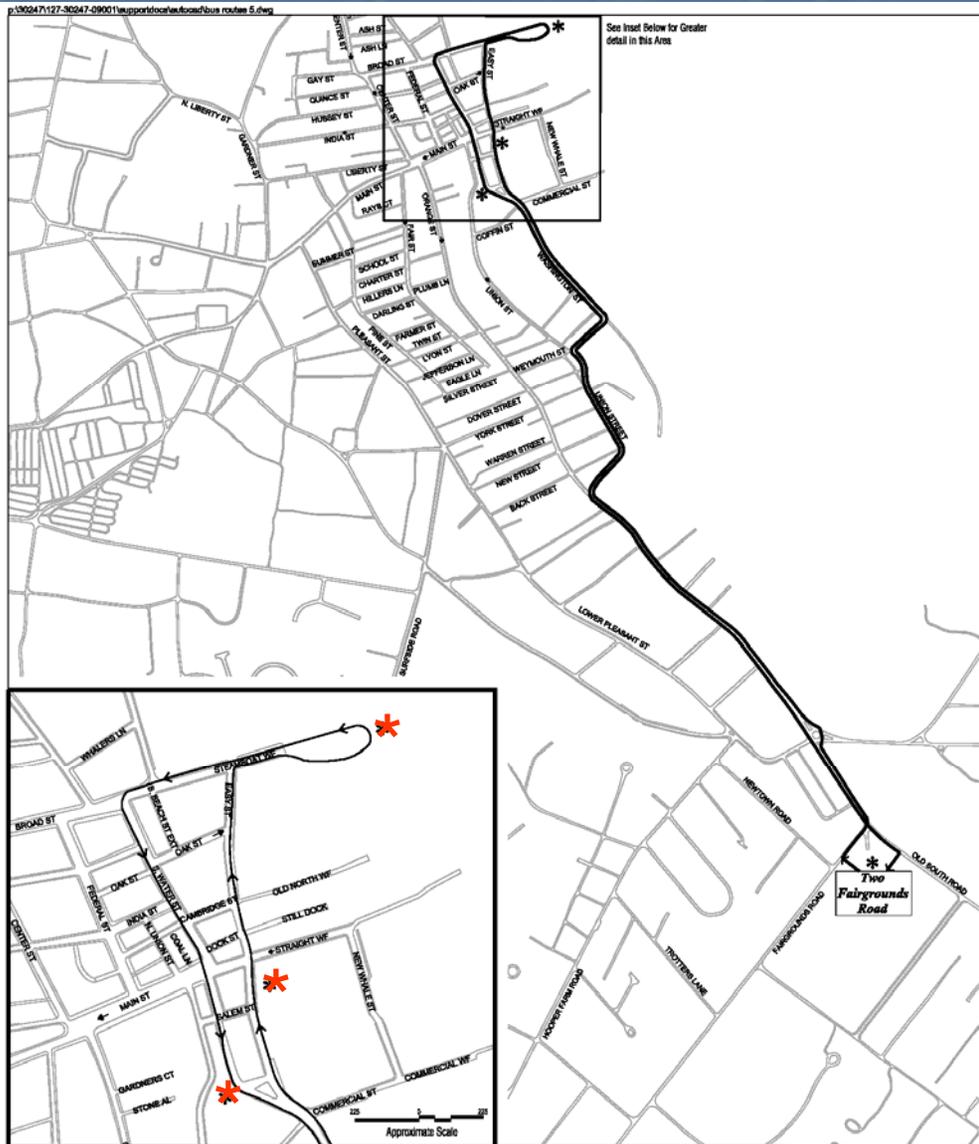
- Buses to run from 5:30 a.m. to 11:00 p.m.
 - First ferry departs at 6:30 a.m.
 - Last ferry arrives at 10:15 p.m.
- Provide service every 15 minutes



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Shuttle Bus Route and Stops



Downtown Bus Stops

- **Candle Street** – between Salem St. and Straight Wharf
- **Steamboat Wharf**
- **Washington St.,** south of Salem St.

Round Trip

Two Fairgrounds Rd. to Downtown

- Roundtrip
 - - 3 miles
 - - travel time (15 to 24 minutes)
 - - loading time (23 minutes)
- Low Traffic – 38 minutes
- Medium Traffic – 40 minutes
- High Traffic – 47 minutes



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Shuttle Buses

International Corporation HC Bus (four required)

– Diesel or Hybrid

- 25 feet long
- 169 inches wide wheel base
- 16 seats with 4 foot wide luggage rack
 - 14 seats + 1 wheelchair
 - 10 seats + 2 wheelchairs
- room for 10 standees



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Shuttle Bus – Diesel vs. Hybrid

Diesel

\$227,000

12 mpg

\$17.50/day in fuel*

Hybrid

\$292,000

17 mpg

\$12.25/day in fuel*

* Assumes 53 miles a day per bus and \$4.00 per gallon of fuel



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Cost Analysis – Start Up

| Description | Cost (Diesel Vehicle) | Cost (Hybrid Vehicle) |
|--------------------------------------|-----------------------------|-----------------------------|
| Fairgrounds Rd. – Temp. Lot | \$450,000 | \$450,000 |
| Modify the Candle St. sidewalk | \$30,000 | \$30,000 |
| Bus Stop Signs | \$15,000 | \$15,000 |
| Directional Signs at Fairgrounds Rd. | \$1,500 | \$1,500 |
| Purchase Four Shuttle Buses | \$908,000 | \$1,168,000 |
| Total | \$1,404,500 | \$1,664,500 |

Cost Analysis – Operating

- June 20 to Sept 6 (79-day operational period)
 - Three diesel buses from 5:30 a.m. to 11:00 p.m. providing service every 15 minutes.
 - One additional bus operating continuously from 9:00 a.m. to 8:00 p.m.
 - \$427,000 per year
 - \$8.00 per ride
- Apr. 20 to June 19 and Sept. 7 to Oct. 26 (111-day operational period)
 - Three diesel buses from 5:30 a.m. to 11:00 p.m. providing service every 15 minutes
 - \$493,000 per year
 - \$13.75 per ride
- \$80 per hour per bus which includes the driver, fuel, bus maintenance and insurance



Discussion



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