#### **Public Transit Advisory Committee**

Tuesday, September 19, 2017, 9am Monument Hall, Princeton, NJ

#### **AGENDA**

- 1. Approval of Minutes from the July 11th, 2017 meeting
- 2. Additions or changes to agenda
- 3. Review FreeB Reports Joan Lockwood-Reck
  - A. Commuter service
  - B. Neighborhood service
  - C. Update on proposed schedule changes and implementation plan
- 4. Princeton Public Transportation Sketch Map and Use Case- Chris Ieva
- 5. Go -Princeton (Initiative for promoting public transit in Princeton)
- 6. Driverless car update
- 7. Update on transponder installation and Google Maps integration
- 8. New business
- 9. Date for next meeting: Tuesday October 10th, 2017 at 9am

#### **Future Meeting Dates -- Tuesdays at 9am:**

October 10 November 14 December 12

#### MINUTES

#### **Public Transit Advisory Committee**

Tuesday, July 11, 2017, 9am Monument Hall, Princeton, NJ

**Present:** Fay Reiter, Chair, Jenny Crumiller, Princeton Council liaison, Susan Hoskins, Princeton Senior Resource Center; Cheryl Kastrenakas, GMTMA; Tamera Matteo, Citizen Member; Jack West, Engineering.

Kip Cherry, visitor

#### Minutes were approved from June 13th, 2017 meeting

There were no comments from the public

Review of June FreeB Reports- Cheryl Kastrenakes

Commuter Service- Total trips- 697

Neighborhood Service- Total trips- 2,060

#### **Proposed Schedule Changes**

A subcommittee comprised of members of the Public Transit Advisory Committee met on June 27<sup>th</sup>, 2017 to consider enhancements to the Commuter and Neighborhood FreeB service. The subcommittee recommended merging the two services by reducing the number of commuter runs and expanding the neighborhood service to provide service earlier in the day and later into the evening. These recommendations were based on the consistent underuse of the commuter FreeB and the ongoing demand for increased service on the Neighborhood FreeB.

Discussion about schedules and whether to eliminate the Dinky stop rather than reduce it. The majority felt reducing the commuter service and providing a mid-morning stop was preferable while some felt the commuter service and Dinky stop should be eliminated.

Fay will give a presentation to council outlining the committee's recommendation to merge Commuter and Neighborhood FreeB services. This would reduce the number of Dinky stops but not eliminate it and expand the hours of neighborhood service. A midmorning run to the Dinky would also be added. This would make the neighborhood service more robust while still providing some commuter service to the Dinky.

Discussion about which of the schedules that GMTMA developed we would propose. Fay and Cheryl will tweak the schedule to come up with a recommendation. The presentation to council will take place at its July 24<sup>th</sup> meeting. Three options will be outlined – to reduce the commuter service and expand neighborhood, eliminate commuter service or leave it the same.

### **Go Princeton**

Cheryl reported that they are finalizing the logo and planning a series of events for the fall.

### **Princeton Public Transportation Sketch Map**

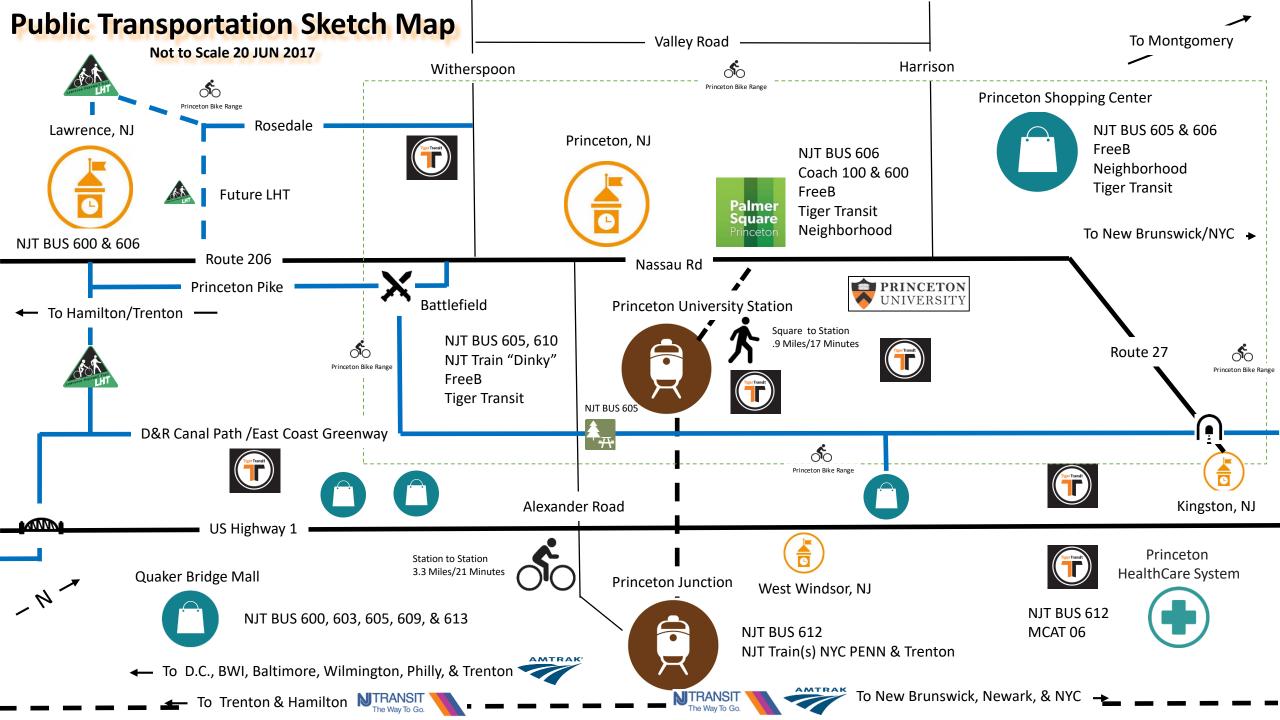
Chris Ieva was unable to attend the meeting, so this item was deferred for discussion at our next meeting.

### **Driverless Car Update**

Pradeep Vachanip was unable to attend the meeting so this item was deferred for discussion at a future meeting.

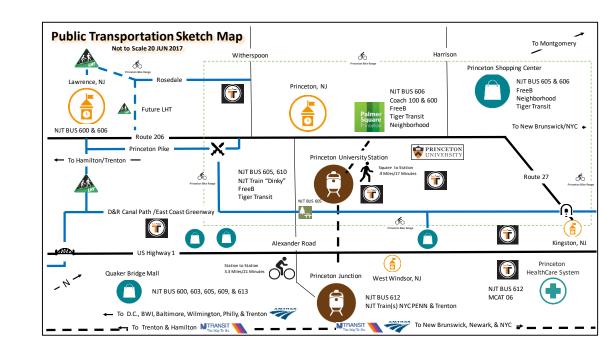
### Overview

- Purpose. Provide a fresh look at the overlap of public transportation options and sequencing in and around Princeton, NJ
- Methodology.
  - Utilized a new resident's view
  - All research was on-line or in person; did not leverage existing studies or local advice
  - Captured observations, not findings
  - Illustrate likely barriers to entry for Public Transport and rationality for public transportation choices
- Key Observations.
  - All things considered, Princeton possess multiple and redundant means to use public transportation
  - The lack of physical signs to assist in Public Transportation is abysmal
  - Tiger Transit possesses great versatility, but it is somewhat a mystery if this asset is available for folks not affiliated with the University
  - Google Maps is horrible at routing Public Transportation choices...especially Bicycles and Buses
  - Public Transportation is viewed as an A to B function rather as a richer experience involving culture, entertainment, dining, shopping, and experience.
  - Shopping by Public Transit is limited. Families reliant on public transportation take asignificant hit in transportation cost and a high degree of effort just to shop.
  - The LHT, D&R Canal, ECG and Amtrak are likley undiscovered Public Transportation facets related to Princeton
  - It could be fair to say, that Princeton could attract visitors from Boston to DC via Amtrack and NJT
  - Limited social media sites exist to support Public Transportation in and around Princeton
  - No Public Transportation "ambassadors" exist to overcome typical barriers to the use and optimization of Public Transportation.



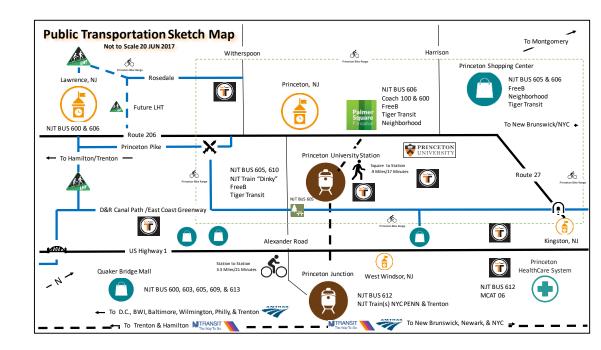
### Healthcare by Public Transportation: Princeton

- I have no car, but I want to access likely healthcare centers under non emergency circumstances.
- If I am 65 older, I can request a free trip to a healthcare provider.
- During AM/PM commuter hours I possess free options to the Princeton shopping center. However, the food prices are on the high side and there are limited department store options less a Pharmacy
- Princeton University and Rider University have weekend shopping runs
- 605 Bus
  - Services Quakerbridge Mall
  - Services Walmart, Target and Wegmans
  - I can access some shopping locations in Montgomery
  - Family of Four Round Trip costs \$16-21
- 606 Bus
  - Services Princeton Shopping Center
  - Shopping access in Hamilton and Trenton
  - Family of Four Round Trip costs \$16-21



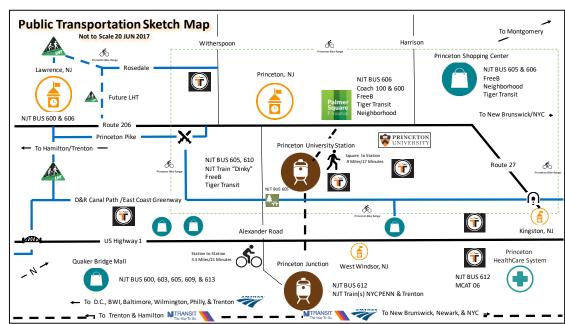
### Commuting by NJT: Princeton University Station

- I have no car, but I do not wish to bike
- During AM/PM commuter hours I possess two free option (FreeB) and Tiger Transit
- During AM/PM commuter hours I possess two local bus option.
- During AM/PM hours I possess two regional bus options direct to station
- During AM/PM hours I posses one regional bus option to Palmer square with a follow-on .9 mile walk to the station; during commuter hours I can take free transportation from Palmer Square to Train Station.
- The WaWa at the station is a great spot for food, coffee, or a newspaper. I can enjoy a few local eateries and cultural events too.
- While at the station, there is a sheltered waiting area and I can use the WaWa restrooms.
- I pay \$3 from Princeton University Station to Princeton Junction; \$6 round trip
- During my commuter hours, trips on the Dinky are frequent...outside of cummuting hours I could end up waiting 30 minutes for a departure in either direction. If I do not have follow-on public transportation, I arrange my pickup at Princeton Junction directly.



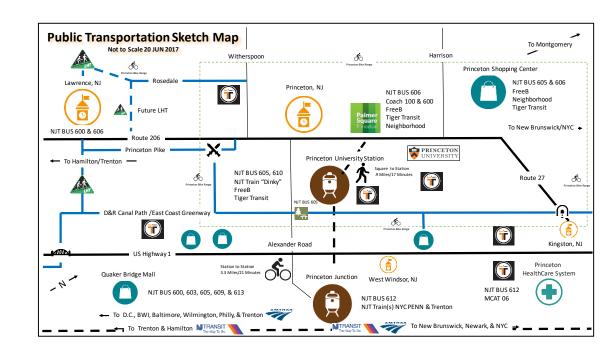
# Commuting by NJT: Princeton University Station

- I wish to bike to the train station
- The train station has a bike repair and pump station
- If I live West of Palmer Square, there is a hill between my residence and Palmer Square.
- If I live South and North of the Station, there are many bike routes.
- Between the Station and Palmer Square, there is a hill.
- Despite the terrain, I can get to the Princeton University Station (Door to Door) in under 15 minutes. I do not worry about parking.
- The WaWa at the station is a great spot for food, coffee, or a newspaper. I can enjoy a few local eateries and cultural events.
- I have a "commuter bicycle"
  - I ride a commuter bicycle to the station, park it, and return home.
  - I enjoy the exercise
  - I cannot carry heavy things
  - I must choose clothing that works for the ride and work
  - I once saw a picture of Amsterdam Centraal Station which had the world's largest bike parking lot.
  - One day, I actually rode to Princeton Junction Station by bike
- I use Zagster
  - Since I on or near or on Princeton Campus, I pay a \$20 annual free, but Zagster trips under 2 hours are free. There are many Zagster stations on campus.
  - Zagster parking at station is very convenient.



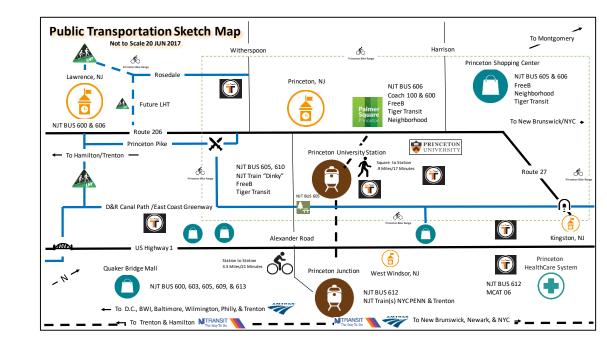
# Commuting by NJT: Princeton University Station

- I wish to drive to the station
- I like the convenience of my car
- I have or wish to purchase a Permit
  - An annual Permit costs me \$495
  - Parking is then \$.30 per hour
  - Permit parking is close to the station and I can predictably find a space
  - I can leave my car overnight
  - Sometimes I am tempted to drive and park to Princeton Junction, but the 3.3 miles takes 15-20 minutes in traffic plus parking time at Princeton Junction.
  - Parking permits at Princeton Junction are \$195-\$295 per quarter, so I do not mind the \$6 round trip on the Dinky
  - The WaWa at the station is a great spot for food, coffee, or a newspaper. I can enjoy a few local eateries and cultural events.
- I do not have or wish to purchase a Permit
  - I save \$495 per year by not having a permit, but I have to walk further or search for a spot
  - I cannot leave my car overnight, but I am a commuter, so I do not mind
  - Sometimes I am tempted to drive and park to Princeton Junction, but the 3.3 miles takes 15-20 minutes plus parking time at Princeton Junction.
  - Parking permits at Princeton Junction are \$295 per quarter, so I do not mind the \$6 round trip
  - The WaWa at the station is a great spot for food, coffee, or a newspaper. I can enjoy a few local eateries and cultural events.



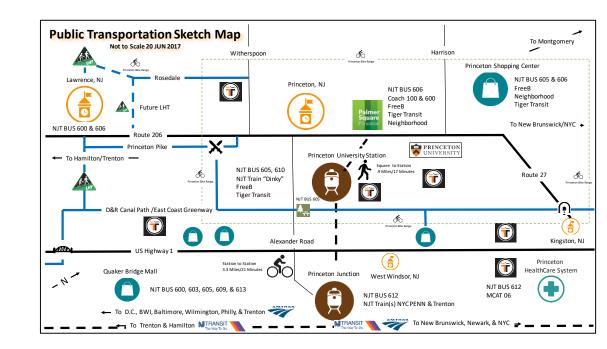
### NJT Public Transportation: Princeton

- NJT Buses only accept exact change, for those who do not have or cannot afford monthly passes, this is a constant challenge.
- NJT Buses can carry two bicycles.
- 606 Bus runs from Trenton to Princeton Shopping Center via Palmer Square.
- 605 Bus runs from Montgomery to Quaker Bridge Mall via Princeton University Train Station and Princeton Shopping Center. Within Princeton, it passes along Wither spoon and along Valleyt.
- Three to Five zones costs \$16-21 roundtrip



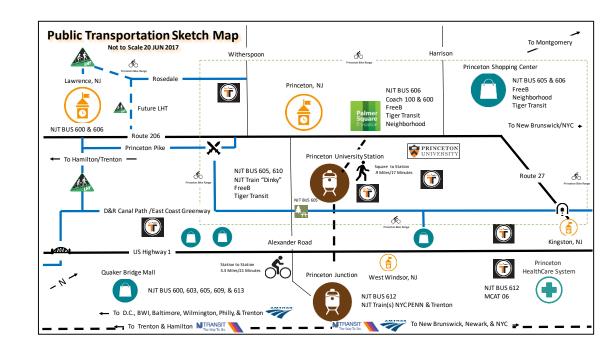
# Commuting by NJT: Princeton Junction Station

- I wish to drive to the station
- I like the convenience of my car
- Since I have to transfer at Princeton Junction, I go there directly
- I have or wish to purchase a Permit
  - As a non-resident, a Permit costs me \$195-\$295 per quarter.
  - Permit parking is close to the station
  - I can leave my car overnight
  - Parking is \$5 per day; if I took Dinky it would be \$6 per day and I would still require transportation, but would save on parking & transportation
  - There is a small store, but it is not as fast or provide as many options as WaWa
- I do not have or wish to purchase a Permit
  - I save \$195-2\$295 per quarter by not having a permit, but I have to walk further or search for a spot...it can be crazy
  - Parking is \$5 per day; if I took Dinky it would be \$6 per day and I would still require transportation, but would save on parking. The APP is convenient for payments.
  - I cannot leave my car overnight, but I am a commuter
  - I one time had to park at a Hotel or Office park then Uber to the station because I could not miss work
  - There is a small store, but it is not as fast or provide as many options as WaWa



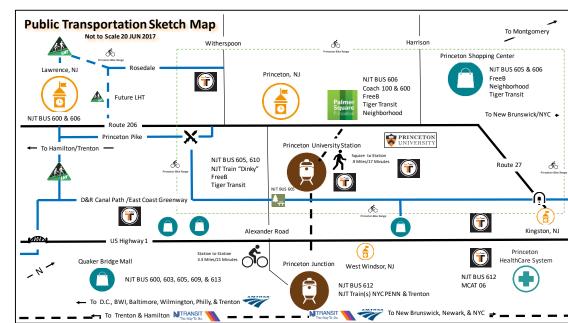
### Traveling/Enjoyment by NJT: To Princeton University Station

- I wish for me or my family to have a fun, but affordable cultural, athletic, dining, or getaway using public transportation
- I can access the station by bus or train
- I do not mind spending a bit of money
  - The University Station proper has immediate access to two restaurants, one theatre, and a hockey arena.
  - With a bit of a walk or follow on public transportation I can access the entire University or Palmer Square
  - Compared to New York or Philly, I can have an amazing evening with public transportation at a lower cost and less time
- I do not have that much money to spend
  - Princeton and Princeton University have many free events
  - I harness public transportation to leverage these free events
  - The WaWa at the station is great to provision my family
  - Case 1. Family of Four.
    - I wanted my daughter/son to see a high caliber Soccer match at Princeton
    - We took train from Hamilton to Princeton University; roundtrip fare was \$21.40 for everyone
    - We stopped in WaWa to build our picnic basket; fresh made sandwiches, salad, and four drinks was \$26.70
    - We had a picnic on the campus and then watched the game for free
    - We had enough cash to buy them each a T-Shirt Souvenir and a popcorn at the game
    - My kids had a great time, asked questions about college, the architecture and learned how to ride on a train



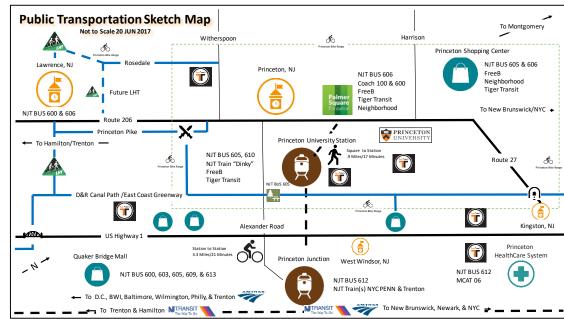
# Traveling by NJT: From Princeton University Station

- I wish for me or my family to have a fun get-a-away.
- New Brunswick (I can use NJT APP to purchase and show ticket)
  - Family of Four would be \$45.20 round-trip.
  - Crime rate near New Brunswick station is low
  - From Princeton, I can access New Brunswick and Rutgers University
  - I can immediately access inexpensive bars and restaurants
  - With a .4 mile walk I can access the River Park, upscale restaurants, University venues, and state playhouse
  - I can access Robert Wood Johnson Hospital
  - I do not have to worry about a designated driver
  - Parking and Gas would likely have been \$10-15 regardless
- Trenton (I can use NJT APP to purchase and show ticket)
  - Family of Four would be \$39 round trip
  - The 606 bus from Princeton would be \$21 round trip
  - Crime rate inside and near station is higher than average
  - There are fewer immediate destinations, but I can take subsequent public transportation, cab or Uber.
- New York City (I can use NJT APP to purchase and show ticket)
  - Family of Four is \$103.80 to Penn; duration of travel varies by Train
- Philadelphia (No single APP between NJT and SEPTA)
  - Family of Four is \$54
- Camden (No single APP between NJT and Riverline)
  - Family of Four is: NJT PRINCETON to Trenton (\$39) + Riverline (\$12.8)=\$47.80
  - I can take bus to Philly for \$6 Round Trip Extra; I receive Camden Waterfront discounts



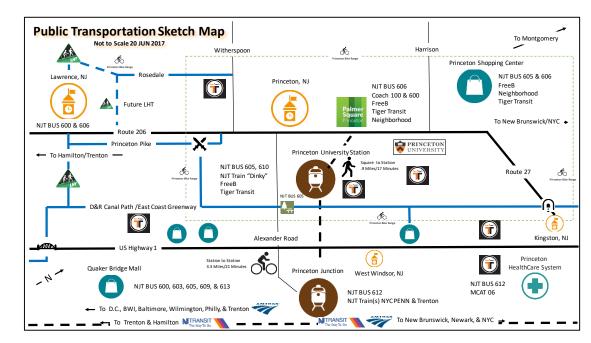
### Local Airports: From Princeton

- I can use public transportation to access Newark, Philadelphia, BWI, and Reagan International Airports
- When considered door to door commute times, the train to plan is not a bad option.
- Parking at airports is not cheap, nor is it convenient
- I need to account for tolls and gas if I drive by cars
- Car Service or Shuttles are viable options, but maybe pricey or non flexible
- I know have flexibility to search for better air fares or flights; I can recommend visitors to use the airports too
- Airports
  - Newark.
    - I can take many NJT options from Princeton University
    - I can take one NJT option to Princeton Junction and then two Amtrak Options to Newark
  - BWI
    - I can take one NJT option to Princeton Junction and then two Amtrak Options to BWI Airport Station
  - Philadelphia
    - I can take one NJT option to Princeton Junction and then two Amtrak Options to Philadelphia 30<sup>th</sup> Street Station and then SEPTA direct to airport
    - I can take NJT to Trenton then transfer to SEPTA to Philadelphia Airport
  - Reagan International, Wash, DC
    - I can take one NJT option to Princeton Junction and then two Amtrak Options to Washington Union Station and then Metro to Reagan International
    - I can take NJT option to Trenten then take six Amtrak options to Washing Union Station to include the Acela high speed train and then metro to Reagan International



# Traveling/Enjoyment Amtrak: To/From Princeton

- I can leave from Princeton University or Princeton Junction
- From Princeton Junction, there are two Southbound Options and two Northbound Amtrak Options
  - Southbound. I can go as far as Miami, but Philly, Baltimore, Washington, DC, Richmond, VA, Charleston, SC & Savannah, GE are tenable in a single day of travel.
  - Northbound. NYC with follow on options to Chicago, LA, Boston, New England, and Canada are in play.
- From Trenton, I have more options
  - Southbound. I can take an overnight train to Miami. The train departs daily at 11AM and arrives in Orlando around lunch the next day and Miami around dinner the next day.
  - Northbound. I can take trains all the way to Boston
  - Acela. I can take a high speed train to DC, NYC, or Boston.
- Accommodations
  - All cars have free WIFI
  - Overnight trains come with complementary use of the restaurant sit-down dining car
  - One can bring food and drinks aboard
  - Amtrak offers student, military, veteran, AAA, and Senior Discounts
  - Many offers and specials are available
  - The Amtrak APP works, but it is not brilliant.
  - Trenton has a full ticket counter for easier planning and assistance
  - Amtrak rewards program is still very competitive akin to the glory days of airline frequent flyer programs

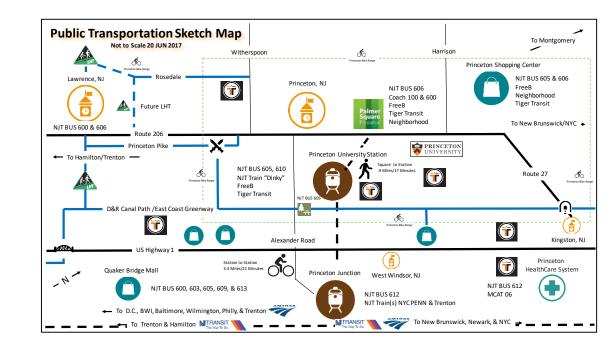


## Commuting By Bicycle: In and Around Princeton

- I am in decent shape, my work can support my bicycle commute, I invested in a decent commuter bike and I value safety
- I surprise my co-workers with the speed of my bike commute, but my times are door to door
- My commute is my workout, it has become a lifestyle, I save gas money and I am kind to the environment
- Some of my fellow bikers are single car families able to save money by being a single car family
- Google Maps is horrible at routing me by bike and on foot
- I feel comfortable mixing my commute with trains or buses
- In and around Princeton
  - On Campus, Zagster requires a \$20 annual fee and free use up to two hours before additional charges.
  - Traveling West or East in Princeton I face hills; I find easier routes and low traffic avenues for commuting
  - Northbound. Nassau is too congested for commuting; I use other trails that parallels Nassau.
- North of Princeton
  - The D&R provides a great path that parallels Rte 1 and I can access Route 1 around Forrestal Village and Monmouth Junction via the Heathcote Preserve but there are limited bike crossings.
  - I can use Terhune or Dunn to travel North West
- South of Princeton

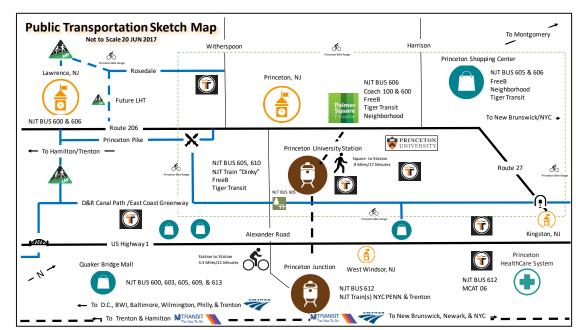
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- The Lawrence Hopewell Trail (LHT) provides a decent connecting tissue between the D&R Canal, Princeton Pike, Rte 206, Lawrenceville, and, eventually, Hopewell.
- I can weave along the South-West area of Princeton along Rosedale, but I presently cannot reach the LHT
- Many office parks, Rider University, and Shopping Malls are very accessible southbound
- With a bike bridge over Route 1, I can pedal all the way to Trenton along the D&R Canal



### Travel/Enjoyment by Bicycle: In and Around Princeton

- I am I surprise my co-workers with the speed of my bike commute, but my times are door to door
- West and East travel poses some challenges with hills
- If I own a road bike, my options are severally limited on paths...I am stuck on roads.
- I can plan out and back trips by mixing Public Transportation
- East Coast Greenway (ECG)
  - The ECG is trying to build a path from Maine to Florida; it passes through Princeton on D&R Canal
  - ECG Map does not list Princeton Venues to include tourist sites, bike shops, restaurants, and lodging
  - ECG map routes Princeton excursion via Route 27 in Kingtson instead of safer and more interesting routes like Harrison or Washington, through the University and Town, and back down via Alexander.
  - ECG map does not list turning basin park or Metro Park North Restaurant for bikers.
  - ECG map does not list Princeton's public transportation
  - ECG map does not list Princeton Battlefield
- Day Trips South
  - I can descend to the D&R along many paths, but I prefer to pass through the Princeton Battlefield and follow the trace of Washington's march during the Battle of Princeton.
  - In 8 miles, I can have a delightful breakfast or lunch in Lawrenceville with a ride or 606 bus return.
  - In 6 miles, I can access some malls around the Quaker road and Rte 1.
  - In 10 miles, I can access Trenton. I can turn North and follow path past Lambertville to Frenchtown or I can continue on to Philly for a challengng 30 mile pedal.
- Day Trips North.
  - I can descend to the D&R Canal along many paths to head North.
  - In 6 miles, I can have a delightful breakfast or lunch in Kingston
  - In 8 miles, I can have a delightful breakfast or lunch in Rocky Hill
  - In 33 miles, I can reach New Brunswick. I can easily return via NJT or overnight and come back.



- Day Trips Within Princeton
  - The Princeton Shopping Center is a great destination for an easy and safe ride with a high value
  - Palmer Square offers me many options to park, ride, shop and dine.
  - Turning Basin Park is great for picnics or canoe rentals in better weather
  - Princeton University has many nooks and crannies to explore
  - The neighborhoods in and around the Great Road can be explored on safe paths