

COMMUNITY INPUT OPEN MEETING #7, March 11, 2023

NO ONE KNOWS THE COMMUNITY BETTER THAN THE PEOPLE WHO LIVE, WORK AND PLAY HERE! YOU CAN PROVIDE VALUABLE KNOWLEDGE. WE INVITE YOU TO HELP US TO SET THE AGENDAS OF OUR UPCOMING SERIES OF COMMUNITY LISTENING SESSIONS BY SHARING YOUR THOUGHTS

HOW WILL WE GET AROUND?

Walkways, Bicycle Lanes, Cars, Traffic, Parking, Public Transit. Mobility, Circulation & Land Use







































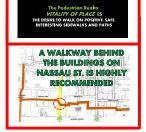














PRINCETON PRINTER

150 Nassau Street
has been proud to
support the work of

PRINCETON FUTURE

for 22 years

info@princetonprinter.com 609-455-1099

Participants

Ingrid Reed; Anton Nelessen; Meera Pradhan; Martin
Lyons; Marina Rubina; Jerry Foster; Peter Lindenfeld;
Frans Coetzee; Michelle Pirone Lambros; Nate Myers;
Katherine Kish; Michael Floyd; Brian Levinson; Nat
Bottigheimer; Adrian Trevisan; Kirk Gastinger; Eve
Coulson; Elise Petterkian; Jamie Herring; Richard Rein;
Steph Gray; Cathy Knight; Joan Gastinger; Valerie Haynes;
Chris Myers; Kim Dorman; Carlos Rodrigues; Shirley Chan;
Bill Moran; Carol Hollingsworth; Isaac Kremer; Eve
Niedergang; Christine Symington; Sheldon Sturges; Larry
Filler; Libby Z. Schwartz; Bill Gray; Perry Jones.





Table of Contents

Planning Ahead with Princeton Future and the Princeton Public Library

1.	Streets are the most important public spaces for all land uses and all mobility modes	p. 4
2.	Here is what PF found out: Part 1. [Part 2 on September 23, 2023]	p. 9
3.	Auto Dependence: Less cars = Less noise, accidents, pollution + higher quality of life a. Traffic: Where are the accidents? Where could there be Traffic circles? • Should speed limits and enforcement be increased? b. Parking: The current viability of the Downtown is dependent on parking	p. 10 p. 12
	 Muti-modal mobility must be phased in before parking is limited. Parking Intercepts & Shared Community Parking Structures in the Downtown Surface parking lots are the land banks of the future 	
4.	 Transit: Coordination; Alternate Routes; On Time; Within 5-minute Walk. Should we lobby for a continuous 2-way bus loop? Each Stop should become a "destination" Serving the greatest number of people Excellent, real-time signage at each stop and on the TRIP SHOT app are required On-Demand, Point-to-Point. PU will have a deal with LYFT 	p. 13
5.	. Pedestrian Walkways	p. 26
6.	Bicycle Pathways & Scooter Speedways	p. 29
7.	'Open-Mike' Conversation	p. 36

PRINCETON FUTURE

COMMUNITY INPUT OPEN MEETING # 7

CIRCULATION & MOBILITY



Kim Dorman, Princeton Public Library

Good morning, everyone!

My name is Kim Dorman. I'm the Community Engagement Coordinator for the Princeton Public Library and I'm delighted that you all came out this morning either coming in person to our Community Room, or, virtually, on Zoom. This program is exciting. *Things are happening!* This is being recorded. We also have multiple cameras so the audience will be recorded. Many people welcome this opportunity. If you don't, you can sit in our reserved seating and we'll know that you prefer not to be filmed. Basically, I'm just here to welcome you to the library... also, to note that this room is T-coil enabled. So, if you have a T-coil enabled device, you can turn that on at this time. For that reason, we also ask that everyone who is speaking, please speak into a microphone. At the point where we're having audience Q&A response, then we would ask you to wait until I bring you the mic. And I think that that's it for me. Introducing today's program is Katherine Kish. from Princeton Future who plays many roles there wonderfully well. Thank you!

Katherine Kish, Princeton Future

Good morning, everybody. Aren't we lucky that it's rain and not snow? One of the things that, it seems to me, we live in a particularly blessed little area of the country. We hear about on the national news all the storms going across the country, and they never quite come here! They turn just before they get here. So, we are very lucky. Perhaps, some more folks will decide to get up this morning and come and join with us. We will start right now. This is a wonderful, wonderful topic, because we all hope to be as mobile as long as possible! Princeton Future [PF] is focusing on mobility and circulation today. [Holding up a PF 'book' of the November 12 Mobility Workshop]. Some of you have gotten this as a PDF in your emails from Princeton Future that you can print out.

Those of you who participate d came and 'had your say' as we looked at maps, you made picture

NYT 2/14/23

Bob's brilliant mind is missed. We worked very well together for a long time. More importantly: we had fun!

you made drawings... and, lo and behold, out of all of that wonderful work, PF Board Member, Tony Nelessen, has digested it and analyzed it. And, today, he's presenting the results of your and his hard work in a series of slides.

Princeton Future is an organization that's been around for 22 years and it was founded by three distinguished people: Bob Goheen, a past President of the University; Bob Geddes, the former Dean of the School of Architecture, and Sheldon Sturges, who's standing in the back. We lost Bob Goheen in 2008... and, we lost Bob Geddes on February 13, 2023. I think many of you probably knew him. He lived to be 99 and active and smart until the end. So, we are very blessed to have Bob Goheen, Bob Geddes and Sheldon Sturges as our founders.

So here we are Planning Ahead with Princeton Future in the Princeton Public Library. This morning, we are honored to have Mia Sacks who is President of the Princeton Council. She is on the public transit committee. She's the liaison. She's a very active person in addition to her role with the council. She's on Sustainable Princeton. She's on the Green Team. The woman has all of the right all of the right interests, I think, to help us all move forward. So, I'd like to invite Mia to come up to make a few introductory remarks to kick off our session this morning. Mia...



Mia Sacks, Member, Princeton Council

I may have to stay on tippy toes for this update. I do many of those things that you just mentioned. But, I don't do anything well at 9am. I'm here just to give just a very short overview of what the town is doing in the realm of transportation.

First, I want to thank Princeton Future for its role in the planning of Princeton. The platform that I ran on was planning for the next 50 years of Princeton. Princeton Future! I knew how important planning was before I got onto Council. Once I got onto Council, I really understood how crucial it is and how a lot of the disconnects that we suffer now in the town are the result of a lack of planning in past decade. So, I'm really grateful to Princeton Future and to all the planners in the room who have contributed to helping the town to plan and are continuing to help us. Transit and Transportation is listed as one of four top priorities for the Council for this year. And that includes the installation of new and improved biking and walking infrastructure. That means the implementation of our Bicycle Mobility plan will proceed. It was adopted by the Planning Board and became part of the Master Plan several years ago. For those of you who don't understand how that works, it's only implemented when there is roadwork done and then as the road is redone, the bicycle plan [or the traffic calming or whatever is in the bicycle mobility plan] is implemented in the street, which makes for a very slow pace of change. I do think it's something that the council wants to jumpstart the timeframe so that we're not dependent on when there's road work done. On different roads, the other parking efficiencies and strategies... and overall transportation design for the future are on the table, which sounds like exactly what is being discussed today.

2:36

Robert Geddes, 99, Transformative Architecture Dean at Princeton, Dies

As an educator, he worked to put architecture on an equal footing with othe disciplines. As an architect, he was knows for buildings at the Institute for Advanced

f D v m



Access more of the Times by creating a free

By Fred A. Bernstein Feb. 13, 2023

Robert Geddes, the transformative first dean of Princeton's School of Architectu and an architect of elegant modernist buildings, many in New Jersey and his native Pennsylvania, died on Monday a his home outside Princeton, N.J. He was

His son, David Geddes, confirmed the death.

As an educator, Mr. Geddes worked to parchitecture on a equal footing with oil academic disciplines. Before he arrived Princeton in 1865, beginning a IT-year tenure there as dean, architecture was 5 of the art and archaeology department 1 aught from a fine arts perspective. Mr. Geddes forged ties to social scientists (even giving sociologists appointment the architecture school) and to policy experts in the university's School of Put and International Affairs, to enrich his unban planning curriculum.

"He had a vision of architecture as a complex endeavor connected to many different fields," said Stan Allen, a Princeton architecture professor who

different fields," said Stan Allen, a Princeton architecture professor who served as the school's dean from 2002 to 2012.

Mr. Geddes elevated the schoot's profile by bringing in a number of important architectural historians and theorists, including Kenneth Prampton, Anthony Vidler, Alan Codyluboni and Robert Maxxwell, all of them from the United Kingdom, (Mr. Geddes admired the work being done by British architects and urban

He continued principicing architecture while serving as dean. In it firm, Gedest Brecher Qualit Continuity has made to be best shown for Continuity has made to be best shown for the continuity of the continuity who knew how to make spaces inviting, the was less examented of the work of Ladwig Mics van der Robe, whose glass boxes, he continuity of Englass and the Robe, whose glass boxes, he of Engenia Cook of The Philadelphia



architecture was as elevated as the institute's recovers. "The level of the stability of edges suggests immediately the level of the work being done," he were a "not remy! the being done," he were an 'not remy! thoughthid correction in orbring functional seeds with a maximum of state and seedshifty."

Mr. Godden was also respectable for

bility."

In Police Department and a specime miscolar and a fine responsible for an in Police Department and applicate which opposed in 1662 and applicate for the Raumshouse for the Studentine for the Student for the Studentine for the Stude

2:41 all * El died in 1932.) Mr. Geddes returned to Yale but in 1947 left without a degree

for Harvard's Graduate School of Design, where he earned a master's in architecture in 1950. While he was at Harvard, the teaching of architectural history was

While he was at Harvard, the teaching of architectural history was practically banned by modernists, including the emigré professor Walter Gropius, the founder of the Bauhaus school. "There was almost nothing to read or to look at," Mr. Geddes said in the 2015 interview.



Mr. Geddes, center, in 2001 with Sheldon Sturges, a fellow co-founder of the nonprofit planning group Princeton Future, and Yina Moore, a local activist. Kesh Meyers/The New So, those have been identified as top priorities this year by Princeton Council. Just a few other related efforts and initiatives that are happening: One is the Vision Zero Task Force led by Councilman Cohen. For those of you who don't know what Vision Zero is, it's about getting to **zero traffic fatalities**. On the municipal website, you can find a long discussion about what Vision Zero is. How it's being implemented in other towns in New Jersey... particularly in Jersey City where it's been very effective... and, how we are working to implement this in Princeton.

The other related transportation initiatives that are going on in town:

I'm on the Municipal negotiating team for our **voluntary contribution agreement with the University.** We have identified transportation as a top ask from the town to the university. We hope that they will be assisting us in our

central core. The Muni, what used to be the Freebie. We renamed it the Muni Bus because there was such a stigma attached to anything free, we thought that Muni Bus might encourage greater ridership. There is a central loop as you all know, which is the **Muni Bus** but it is very slow. And if you have all day to ride it to get from point A to point B, that's your, you know, that's the service for you. If you need to get somewhere in a rush, unfortunately, it doesn't work. So we moved on. It's in my capacity as lead



The Muni Bus Route

under the Transit Committee, overseeing transit initiatives within the municipality that I have worked to discontinue a relationship that we had previously with the Stouts Bus Service. And we have contracted with We Drive You which is the same vendor that the university uses. So, we've had We Drive You in our loop for the last year and the objective of moving to partner with We Drive You was to as a steppingstone to then fully integrate with the University and that is what we are discussing with We Drive You in the context of our negotiations in which we hope to have an announcement very soon. That leaves all of the various routes leading into the core. And Tony, I know that you have had concerns about what those routes might be. At present, our thinking is that until we are able to bring about a more robust transit network, the Town would look to implement a micro transit system leading into the core. We've had discussions with Via. There was a bit of sticker shock with a million dollars just to get onto the playing field of having them do micro transit for us. We know that Westport, which is a similar town in size to Princeton, had Via doing micro transit for them. Their senior center actually footed the bill to get it started. And, then, once it reached a level of success, with you know, scaling up to a level where it was economically more viable, the municipality became more involved. But, at present, for where we are in Princeton, we can't afford Via. We have been in pretty extensive discussions with Dan Benson, who may be our new County Executive. He is currently the Chair of the Transportation Committee in the NJ Assembly. And, there are a number of micro transit proposals coming through at the state level. We have one to the Governor's Office, one to New Jersey Transit and one in the Assembly. Princeton has been discussing, raising our hand to be hopefully one of the first pilots for micro transit as the state rolls it out as an option.

So, just to recap, that little part of where we're moving: there would be a core route, which would have more rapid service and which the University and the Municipality would share. Then, that would free up resources from the Municipality which we would use to implement micro transit to bring people in from the outer areas. We're particularly concerned that, as you all know, we have many new affordable housing sites coming online with the town's compliance with our Mount Laurel obligations. It is a top priority for the town to make sure that each one of those affordable housing sites has adequate public transportation options, particularly the sites that are not located close to town. Although I will say we've made a big effort in our affordable housing settlement to locate as many sites as possible in town to foster transit-oriented development.

The other thing I'm sure you all have heard a lot about is the **proposal for New Jersey Transit for the Dinky Corridor** that would represent a multi-million dollar investment in a small artery that links Princeton to the rest of the outside world...This is **particularly important in times of emergency** because with climate change, Princeton has, as you all know, experienced a greater frequency of storms that leave our roads in a state where we're not able to get out of town, **even to the hospital**. So that Dinky Corridor is a lifeline for us and for the University, particularly in

emergency situations. It also is an economic lifeline for us in terms of making it possible for commuters to live in Princeton and commute to New York and Philadelphia comfortably. I know that there are there's a group in town that is very interested in a certain particular train option that someone who graduated from the University has proposed: Henry Posner's company has a train.

I'm not sure that's exactly what New Jersey Transit has in mind. But suffice to say that however people come down on the Dinky issue, one thing that is not on the table

that however people come down on the Dinky issue, one thing that is not on the table are the current Arrow cars. Those are being taken off, they are being retired. And the Town has a few years to figure out whether it's going to work with the State [New Jersey Transit] to advocate for what they have in theory promised in terms of investment for this very important connection, or whether we are all going to keep our heads in the sand. I hope that we will approach this issue from the framework of the reality of what is... what is actually possible. Because we stand to gain a lot. It's pretty unusual that



Henry Posner, Mayor Freda & Professor Alain Kornhauser and the proposed battery-powered Dinky





a town would be looking at that level of investment in a small corridor that connects their town to the rest of the world.

Then one more thing. Let's see, we have a study, we've hired a consultant to do a study of the entire **Harrison Street corridor**. If I had my druthers, I would love to bring back the trolley that just went up and down there. But at a minimum, we know that there needs to be **a road diet** there, which will include **bike lanes** and hopefully activating the streetscape in front of the shopping center so that it's a more walkable, bikeable, commercially accessible corridor there.

Finally, what we are looking to do in the Town is create a proposal that we would submit to the Transit Trust Fund. This is money jointly held by the University in the Town for things related to transit. A comprehensive proposal for a **Town-wide mobility study** along the lines of what the University just finished. If you're not familiar with the University study, I think, Sheldon, I think you may be referencing it today. The University presented it at Council. Charlie Tennyson, PU's Transportation Director, had presented it at Council a few weeks ago. He also came to the Transportation Committee and presented it so I can provide the link to that if you're interested. But that is what we want to do: to have a mobility study for the town similar to that. That is comprehensive. I'm really excited about today, because I think the results of the discussion today can very much inform the proposal that the Town crafts. So, that's it, thank you so much. And feel free to get in touch with questions.

Katherine Kish. You know, one of the phrases that I want you to remember is, as we talked today, is that it's all about coordination. We have so many exciting resources, the ones that Mia just discussed coming from the Town. We have the University. We have, you know... look at all the buses that run around: you've got the Institute's, New Jersey Transit's, COACH, School Buses. There's a lot here already. The issue is how do we pull it together? And you know, some of the people who have the best ideas of that, are you. Many of you were a part of the discussion back in November that we had at the Seminary. This book, talks about it and just so you know, these books are available. Each one of our meetings is written up in one of these books, Sheldon sends them out to you digitally. If you want one that's printed. [They're a little bit expensive to give out. So we don't do that.] But, you can certainly go to Princeton printers and get a copy printed 'on demand'. Or, you can copy it even though the book says it's copyrighted Princeton Future, we'd be delighted to have you copy it. And, also, the library has archival copies of all of these, but what these are, this one says Mobility and Circulation and it's what it's what Mia was just talking about. In many ways, we have started the process. You know, some of you may be a little bit confused about who does what. One of the things we want people to understand is that Princeton Future is not doing the Master Plan. But, Princeton Future is having meetings that allow you to participate...to have your say as to what the Master Plan could become. I want you to think about that. What we're what we're really about here is hearing what you

have to say and making sure that the important people in the in the universe of planning, like the council and like the university and like others in this town, hear what you have to say because that's critical.

We are so lucky to have a world class talent here in urban planning and design. Tony Nelessen has taught at Harvard. He's taught at Rutgers. He has finally decided after 39 years at Rutgers that he is going to enjoy his house in France, as well as his house on Bank Street. We are so lucky to have him here... thinking about these questions of Visioning & Planning... taking what you have to say and turning it into plans that can be actualized. Tony has analyzed what you said back on November 13. He has put <u>your findings</u> into a coherent presentation that we can look at today. So, Tony, please come up!

Tony Nelessen, Princeton Future

Katherine did a really excellent job of introducing what you're going to be seeing today. Let me just start: I'd say "it is just incredible. What people have told us! What you guys want for the town". I have been in this business some 50 years. What I have been really interested in my entire life is: What are your opinions? I don't see myself as a planner. I see myself more as a facilitator of people's desires trying to see whether or not we can actually get those implemented.

Now, as Katherine said, on November 12, 2022 we asked: How do we plan **to design a transportation system that's less car centric**. This means that we know we're going to have cars... but can we actually design a system, which is less 'carcentric'. We wanted to focus on what the people of our town wanted now. And, we're going to do that again here today. We're going to show you each of the pieces on which the workshop worked and the conclusions that they came up with. I synthesized that work. Today, we're going to open it up for questions at the end of each segment. And then, ideally, an open session at the end.

We're going to start out with this basic premise that **streets are your most important public spaces**. This is where & how people perceive the town. It's a framework for all land use and mobility modes. So the streets are really the sacrosanct part of the town itself. Then, **the movements on the street are really what we call the lifeblood of the community**. I mean, if you compare a street that has no pedestrians on it against vs the street that's has lots of pedestrians on it... The street feels like it's alive and active. So, the key factor here is that you really

STREETS ARE THE MOST IMPORTANT PUBLIC SPACES, THE FRAMEWORK FOR ALL LANDUSES AND MOBILITY MODES

The movements on the streets are the lifeblood of a community.

Along with the buildings, they determine a positive or negative spatial image.

need the buildings to determine the positive space. Princeton Future, now, I think this is the seventh meeting that we've held over the past year, [and, I've done a 220,000 people across the United States, 400 towns and cities across the board.] Princeton Future calls these open public meeting an effort to encourage **participatory democracy**. The first meeting we had in this room on March 5 was entitled *Hopes and Dreams*.

a way to set goals for the Town. People just talked. What do each of you want? How do you feel about the town? The 2nd and 4th meetings, on April 30 and



September 17 were workshops to draw on maps and discuss "What are the Areas that are Susceptible to Change?". 'Susceptibility to change' is a very interesting term.

The findings are on display on the walls of Dohm Alley, across

the findings are on display on the walls of Dohm Alley, across the street from Nassau Hall. What are the possible new land use opportunities came out of those conversations?

On June 4th, we asked the leaders of our non-profit





organizations to put forward the *Hopes & Dreams of their organizations*. Then, on November 13, we had a stunning workshop on *Mobility and Circulation*.

On January 21, 2023, this room was packed for a second meeting on *Housing Justice* when the Princeton Public Library joined with Princeton Future. The great quote from that meeting was when my colleague on the Board of Princeton Future, Marina Rubina, posed the question: "Can't we make places to live that are **livable** and **lovable?"**. I thought was really wonderful.



Today. We are presenting the Workshop, asking the question:

The next meeting on May 13 will Space. And, on September 23, what all the participants have Dreams...Areas where there and Mobility...and Housing.

Doodles". These are pencil of the choices we might have

Princeton Future's belief is that the community has a stake in the vision community better than people have been involved early on in my designers who say: "I know doesn't work. It never did work have to listen to what the people of



findings of the Mobility & Circulation **Did we get it right?**

be about *Public Lands & Open*we will bring it, all of your input, all of
worked on together: Your *Hopes &*might be change...Circulation, Transit
And we will present some "What If?
sketches and visualizations of some
based on your input.

most successful places are where a That's clear, and no one knows the who live and work here. I mean, I career with so many planners, and what's right for your town". Well, that that never should work. You really the town have to say in order to begin

any implementation process. And I will tell you, what has been incredible for me is what you guys have told us what you want. The question is: Can you get what you want implemented? I think Mia began to allude to that. So, what do people want? Well, the interesting thing is these are the results of those six presentations that were done. And just to give you some idea of the November workshop, the last Mobility workshop, we gave them a

beautiful big, high resolution base overlays, and you'll see the funny minute walking distance. That's transportation system. We know transit pretty comfortably. Even have a really great pedestrian beyond that, they're automatically almost beyond five minutes they and we gave him the space very accurate. Here you get actually used. This session was



map. We gave them tracing paper little cut out there. That's **the five-** the kind of **the basic DNA** of a people will walk for five minutes to now, some people are saying if you system, they'll walk for 10. But going to default to a car. But even default to a car. So, what was really... map. It was really incredible. Very, to see the general layout of what we called "Ideas worth documenting".

Now, there were 11 graphic exercises that people went through. It was really fantastic. "Remember, you put the

base map down, and you put the tracing paper on top of that." Then, we asked a question, and, then you used the

Magic Markers to... and you'll see the kind of messy drawings that we got. But we will then take there were 10 teams that did it. We take the overlay from each team, lay all 10 on top of each other and find out what the consensus is. Now, there are always going to be people who are going to disagree. Y'all know that in fact, my experience nationally with 400,000 people that we've dealt with: **14% of the people are negative**



all the time about everything. Just the way it is and I've really quantified

that: it's about 14 out of 100 people are negative about everything all the time. I can't say they got dropped in their head as a kid. I'm not really sure how exactly that happened. But you have to expect that even some of the most beautiful visual preference surveys we've done, where the average deviation from a plus 10 or minus 10 gets a 10 or an eight or a seven. There's going to be one person who gave it a minus 10. I mean, that's just the way it is with human beings. So, once we finish those, we then synthesize that now we ask them:

To show graphically where and how you think a mobility and circulation framework would occur in and around your town in the next 10 years. Here's what the participants recommended. One: safe intersections, traffic calming opportunities and traffic circles. Wow, you're gonna see that.

Two: locations for mixed-use parking structures.

Three: **locations for a transit loop and stops.** Where do you put it? Where are the stops within the five-minute walking distant Four: **locations for on-demand transit stops.** Now what is really fantastic is that...Have seen the University's proposal?... This almost completely mirrors what the university has done. I mean, it's extraordinary what the university has done. Unbelieval

Participants recommended:

- Safe intersections, traffic calming opportunities and traffic circles
- Locations for mixed-use parking structures.
- Locations for transit loop and stops to serve residents and businesses and determine the **5-minute walking distance** to important locations.
- Locations for On-Demand Transit STOPS to serve those who are not within walking distance of local transit and live in the immediate region or for after hours.
- Locations for **Sidewalk improvements** with emphasis where most people will or want to walk.
- Ideas for Witherspoon Street as primary spine and green street
- Recommend bicycle/micro-mobility network and parking

I mean, not only do they have their own unbelievable transit system, but now if you after the bus system stops working for the day, you can call and use a LYFT system to allow you to go anyplace within the college network area. And it was interesting that this was proposed by you guys, and well before the University made its proposal. Five: the **location of sidewalk improvements**. And then of course the ideas for with this one street as...

Six: a major green spine. And the last one is

Seven: a bicycle network. I'm going to try to go through all of these now. 10 teams 50 overlays. We looked at 50 overlays to find out what in the world was the consensus of those overlays. And here's what we found out.

"Unfortunately current conditions in downtown Princeton are currently primarily dependent on cars and parking" "It is not yet feasible to limit cars dependency and parking UNTIL MULTI MODAL MOBILTY IS IMPLEMENTED"

We can create a more LIVABLE and LOVEABLE town that is less car centric,.....

provided we have a consensus for a holistic mobility network similar to the University.

#1. We can create a less carcentric, more livable and lovable Town. That is absolutely clear. We could set Princeton up as one of the more extraordinary university towns in the country if what you propose actually got implemented, *provided that we have a consensus for where we want to go.* And that is really critical. Now, we know we're auto dependent. This is from the studies that have been done by the Town itself. We know the current conditions. We are currently primarily dependent on cars and parking. And it's not feasible to do some of this stuff until we talk about multimodal implementation of some kind. **We have to make it as convenient as a car.** How do

you do that? And that's a really interesting question. Now, here's an interesting one for you. I just went and filmed the cars coming in from Montgomery: these are people coming into town. But here are the basic statistics. The average car in the United States carries 1.1 persons which means it's got **five empty seats on it all the time**.

That car needs five to seven parking spaces. So, for every car on





the road, you need five to seven parking spaces someplace: one on your driveway; one on your father's driveway, one in the parking deck downtown; one for where you go grocery shopping et cetera, et cetera. You add up all the pieces, you wind up with these numbers. If you look anywhere now,

literally, cars are sitting there running with one person. It's fascinating.

The thing that's interesting about this is, of course, what would happen if you had to eliminate the need for one car? A lot of people here have 2-3-4 cars. What happens if you could actually get by with just one car now? It would be great if what could begin to do that? You know, to test the water



I gave my Smart Car to Cars for Kids. I gave one car way to find out whether or not we could exist. I live on Bank Street. You know, I walked here this morning. And we have one car we park on the street and it works. I expect that this is going to happen more often. Everybody we know, the smart people here know, we're

If you and your family live and work within a 5-to-10-minute walking distance to reliable, available transit, you will be able to eliminate the need for the extra car. That amount of money can be spent elsewhere, improving the quality of community life and the quality of your personal health.

Imagine: No need for an available driver if: all destinations in town and the immediate region are available by using convenient, safe, affordable transit, bicycles and walking.

buying electric cars. You're seeing commercials for electric cars all over the place because we think it's more environmentally responsive, which...er... maybe... it is, but where In the world the electric supply coming from...the lithium...the cobalt] that really is the \$64,000 question for most people. Plus, the cost of about 10 grand a year per car...for insurance, gas. That's not including tolls, Carbon emissions and other environmental issues, deaths, losses, life quality. I mean, really, the idea of using the car is fundamentally very expensive from a community point of view, but it's convenient. You can get in

when you want to go...where you want to go. It's got air conditioning. You listen to your podcasts or what have you. Everybody thinks it's cool and really interesting. BUT the reality is, over the last 20 years, it may the most destructive thing that has probably ever happened. Nonetheless, it is something we need to live with.

I mean, yeah, the question that I always kind of wonder is, how many car commercials have you actually seen? How many times have you been propagandized by car or car tire commercials which show

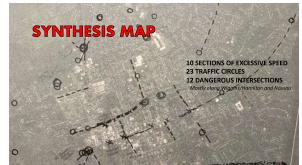
How many car commercials have you experienced in your lifetime??

beautiful roads in the middle of nowhere, at the top of the hill someplace, that keeps telling you to "buy, buy, buy!". We've been inundated for years and years. And, of course, the byproduct of that stuff is **parking.**

According to the AAA in 2022, the national <u>average yearly</u> cost to own and operate each new vehicle was \$10,728 or \$894.00 per month for each car. Now, what happens if we have fewer cars? Well, it's obvious: less noise, less accidents, less pollution, higher quality of life. And, of course, the thing that is interesting, what would happen if those surface parking lots actually became something else. If we could actually remove some of the cars from the area and make

more land available? And I'm going to show you a couple of those as we go through. The first thing we asked people is "Here's the map. Here's a magic marker.

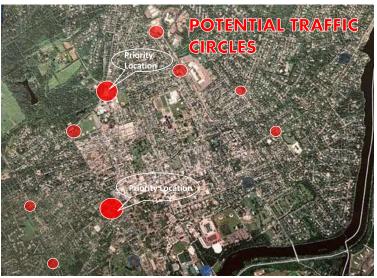
Where do you think streets in Town have excessive noise and speed that make it a dangerous intersection, and where do you think traffic circles should go? Let's see what people responded. Here's what we're going to find out. This is a synthesis map. So it's messy. Here's



what we began to find out. There are 10 intersections of excessive speed. You would desire 23 traffic circles, and there are 12 dangerous intersections, and most of them are on Wiggins Street. As you can see, the little X's at the bottom. So, this is everything. Now I'll break it down for you in pieces.

If you actually look at the one. In all the graphics that you're going to see, the heavier the line, the more intensive people thought something should be done. Well, the big one is Wiggins St. People are just screaming by on that one road. It really needs to be slowed down by some form or another. That is very clear. Should we be setting lower speed limits? Let's say Wiggins goes to 15 miles an hour or more enforcement. Do you guys think tha would be a reasonable thing to do? How many you think that would be a reasonable thing just raise your hands. Perfect. Okay, so I got the word OKAY.

Now, here's another one, which is this is the second part of it. **TRAFFIC CIRCLES**. Where do you think th



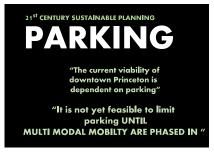
most dangerous intersections are? I was really a bit surprised about this one, for instance, the one at Vandeventer. I always thought that was a pretty good one. I hate waiting for anybody looking for an X across the street so that you can see that the things actually going to people are going to cross the street but the other one that came up really surprised me was Chamber Street, because the new hotel is going to open up and the question is how do you get from the university across the street. But look at the big ones. The big ones are obviously where 206 meets Mercer that's a big one and of course 206 and Witherspoon Street. These two are the ones that people think and they're on 206. If I remember correctly, way back when, there was a proposal to do that. Now, remember, this is not a traffic engineer telling you this! These are the people who drive these streets are telling you "This is where we should put these things". That's the distinctive fact.

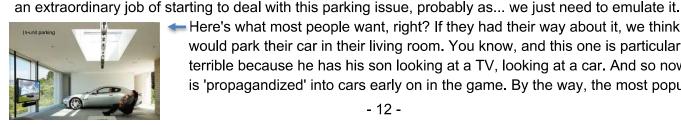
Elise Petterkian

Thank you very, very much for your presentation... My daughter was hit by a car. She is alive. [The rest of Elise's recording became garbled]

Tony Nelessen: I think you have answered the question: We need intersection improvements and traffic circles. Let me move on to the next topic. Which is very near and dear to lots of people but hateful for others. The

economic viability of downtown is dependent on parking. I mean, we know the And the corollary is that it's not yet feasible to limit parking that until such a point as we have the mobility network. It needs to go into place first, and you'll see what the town had proposed. From one point of view, there are two kinds of parking. Incremental parking where each site provides its own parking. That's been the damnedest thing ever. Everybody's got to provide their own parking as opposed to collecting the parking. And, then, there's the notion of shared collective parking. Now again, I my hat's off to the University because, my gosh, they have really don-





Here's what most people want, right? If they had their way about it, we think they would park their car in their living room. You know, and this one is particularly terrible because he has his son looking at a TV, looking at a car. And so now, the kid is 'propagandized' into cars early on in the game. By the way, the most popular selling car in the United States is a little Fisher-Price vehicle given by grandparent to a three-year old, right? That's got the little orange car so they teach kids how to deal with cars really early & often. There are actually seven kinds or parking not just two but seven. And the ones we know **on street**, **surface**, **private & public garages**, individual, local neighborhoods, which is really more what's in the back here or **partial community** which is a result of the great visioning process put on by Princeton Future. That put this

parking deck in the back. But now University s the first to come along with a regional intercerate garage. Now, I

really, if you've been over there, it's just really remarkable. I had a dinner with one of the emeritus faculty at Princeton He said: "It's so lovely. You just go drive into the garage. I get on the bus. It takes me anywhere. I don't have to go to the campus at all. They have figured it out." The questic is "Can the Town now figure this out." The garage is rathe functional. I mean, there's nothing fancy about this. It is

PARKING INTERSEPT



just a functional garage. And, of course, they've reinforced it now with these relatively large electric buses.

But what I found interesting is that when we actually looked at and showed people at the workshop, here are your **two-to-three-minute-walk-to-the-nearest-garages**, which is typically what you have to have. **You've got thr** and when you look at it, *they cover a good portion of the downtown.* But there is still supposedly a parking shortage. When you take parallel parking off the street in some cases, where do they go? Well, you know,

here is certainly one I parked my car there When I first started it was \$35 a month nov it's \$260 a month to park in this garage. Ar really it is I think it could go bigger, higher, something else could be done with that site







And, of course, this was really the granddaddy. I think the town did a really, really good job on this one. And what they did perfectly is: *they created a*

public space with the garage. It did not just put this thing in the middle of town and making it obstructive. Now, this is happening in my backyard. That's I'm there's my backyard fence and the **new Graduate Hotel** is goin_

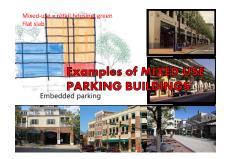


to have underground parking for a certain percentage of the rooms. This is what it looks like now. We also have surface parking and some of the most extraordinary places. This one of course is awful with this one straight line.



Here's some examples of **mixed-use parking structures**. I mean, and we've got one right here in town, obviously on Hulfish Street with retail below and housing up above.

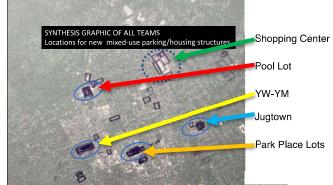




It's a typical example that shows how a garage can be embedded with housing above and retail at the bottom level with a park and a green above the parking structure in the back based on that section.

So, I showed people that and I said okay, now where would you put the parking structures if you had a chance?

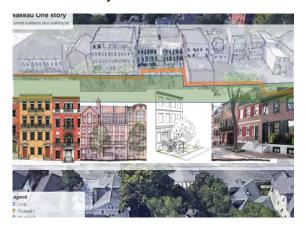
To build these parking structures, the thing that I also stressed to the workshop: that **these parking structures have to be fl. slab.** They can't be helical. They can't be a helical because over time, we're going to convert those parking structures to classrooms or large floor-plate offices...or, something else. They should be flat slabs for a period of time. Now here's what people said:. Again, the darker the color, the more intense the location. One was **the <u>pool block</u>** next to the Municipal Building. The second one was in back of **Park Place.** The third one was over in **Jugtown.** And the four



<u>YW-YM site</u>. Those are the four that people had recommended. But the one that got the most force is out by the **Shopping Center**. Use a <u>shopping center</u> as a kind of a parking intercept facility. I mean again, it's just

uncanny what you see and then of course, here's the more refined map of what those places actually are. Now, one of the things that you would have is we know we've got the three of them downtown. You know, we've got the **Chamber Street lot**. You've got **the Spring Street lot** right back where we are and then you have the lot that kind of the buried lot. But these are the two potential locations if you zoom in on downtown, that's a mixed-use parking structure of bond **Park Place** and the one behind **Tulane Street** which I thought was pretty interesting. Now, this is an example don't get too shocke when... you see this but people talked a lot about the Park Pla anyway. Why could we just put parking underneath and housir in the front? Why could we do that? And of course, you might

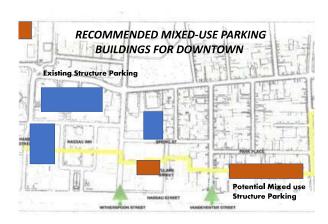




know that the Christian Science folks are really interested in doing some kind of development but anyway, there it is. Don't get shocked when you see this. I said what would happen if this Princeton Mews Walk that we have started on one side of town was just extended to Moore St. We'd put the parking at one level below because it's at grade. And then we'd do townhouses in the front of that lot that could look any like any of these. Would that be something that would be reasonable and a top of the parking deck

will be going to the park. So you could have all the parking you need for the new townhouses in the front infield and you would have a green park on the top of the parking structure. I mean, it would be kind of an interesting thought. Now the question is should we do that? Should we try to push for more mixed-use parking structures in order to be able to free up some of the parking spaces of the parking lots as a possibility of improving the viability of downtown so what are you what do you guys think about that? Any thoughts on that?

Anon. I agree. But most parking garages are pretty horrible. Tony Nelessen. Although if you go to other places, I mean,



particularly the European ones, in which I spent a lot of time, I think simply because we visit a lot of cities. They're painted. They have signage in them. They have little red, green dots that tell you where you can actually park. They have music! The ceilings and the floors are painted beautifully. And you can tell how many spaces are empty the minute you drive up. None of which is here. Okay. Here. Here's now let's courage. I mean, the question is, here's where people said to us, rather than having surface parking, let's use the surface parking lots for something else. That is the really the name of the game because the land is sitting there being wasted. For all practical purposes. The houses that are facing are oh, they leave them all. All of those. All of those with all of those would stay. Yeah, all of those would say yep.

Okay, now the transit recommendations. Now, we're getting into the nitty gritty parts of this stuff. The 1996 Master Plan said "Provide more public parking and public transportation options..." This one has been really in the works for a long time. And the from the early 2014 Princeton Future study by Ralph Widner, 13,000 people are candidates for better public

"Provide more public and private transit options for commuter's, residents and visitors in order to help reduce traffic on our streets." "Nearly 13,000 people are candidates for expanded local transit."

transportation. One big problem is: "The system that we currently have running is not understandable". That is what people have said about the available modes. So, I started counting them. The system is not easy to

21st CENTURY SUSTAINABLE PLANNING **TRANSIT** RECOMMENDATIONS understand. We don't understand when it is going to come and when it's going to go... when it's going to get there. 'They' wonder why it doesn't work. First are the New Jersey Transit buses.

Now if you try to figure this one out, I mean it is impossible. Can you be certain that the bus will come and connect to the Dinky and get to the Amtrak on time? Or, if I walk to the Muni/Freebie stop, will I get to my appointment in the Downtown on time?

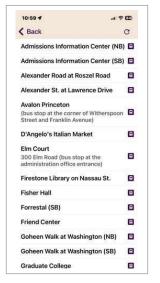


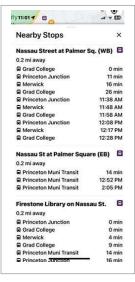
The Muni Route

"In your mind, you can't see it!"

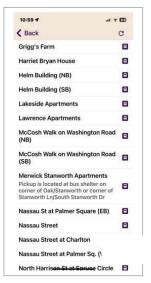
[Editor's note. During the meeting, Council Member Sacks mentioned that Tiger Transit's **TripShot** is active and is up on the Municipal website and the University's website, it's an app that has the following screens on it.

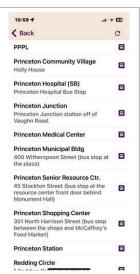
We may have progress in the making!!











If the Town-Gown negotiations are fruitful, it looks as if TripShot is an app in which you will be able to plan your trip as it has the potential to coordinate Tiger Transit buses with real-time links to New Jersey Transit trains and buses and the Muni bus. The transponders on all of these systems need to be able to communicate. Maybe one day, you will be able to purchase a roundtrip ticket to your final destination].

Now here's another beautiful graphic from the University:





You know, PU has had extraordinary 52 seat buses running around town now for quite a while and then they have just purchased 17 26-seat electric buses. Which is still they're still quite large.



A side note. I was at the Rotary meeting yesterday at the Hyatt where I spoke about all of this yesterday. I thought why is the HYATT parking — lot full of 10 of the University's old, empty buses. Why can't we use these buses to institute our Loop system for a while? If they're just sitting there, paid for? I thought that was pretty extraordinary. Now, there are so many empty buses. The question is: Could they be in use right now, somehow or another?





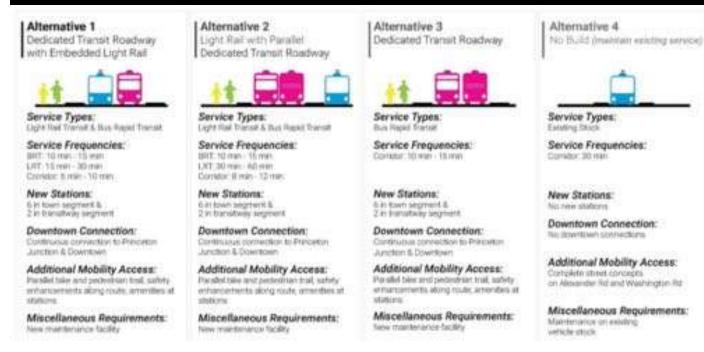
A LOCAL multi-modal approach
DINKY UPGRADE with local loop
University Buses
NJDOT Buses
The Freebee
School Buses
Developer Shuttles
The Institute Buses
On-demand transit- Point to point
Taxis/Uber- door to door
Senior living buses
Taxi

Weeks before, I sat on the bench in Tiger Park and took these videos: just watching buses. And the reality of it is **they're all empty**. There's nobody using these big vehicles going through town, mostly empty, hardly able to make the corner Now there's something wrong with the system when you're paying that much for a system and all these things, including IAS buses, school buses, senior citizen buses. The only one that seems to be somewhat functional is the New Jersey Transit bus. So other than all the rest of them are literally sitting in there are driving through our town virtually empty now if we only could coordinate that stuff together but how many do we need to coordinate a look at this? You got the Dinky upgrade University buses, NJ DOT buses, the Freebie, the School Buses, developer shuttles, the Institute buses, the on-demand transit /door-to-door of Uber & LYFT, point-point senior living buses and taxis: They're all here ready. They're all doing their own thing at different times and nobody's coordinating any of it. The town needs, more than anything, a transportation coordinator to be able to put all these pieces together. The question is: "Can they be coordinated enough to reduce traffic and reduce the need for more parking?" And this next topic is very interesting. As Mia explained, the idea of the

LIFELINE ALLEY is really critical. NJ DOT's ideas:

Dinky Upgrade with Local Loop

Once in a Lifetime Transit Implementation



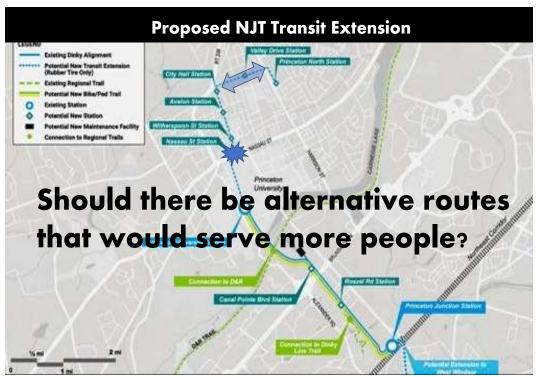
We do need to get to the Hospital when the roads are flooded.

And, you know, the question starts to be: Is this what's going to be done?

The minimum: Do we just have to replace the cars and we'll leave everything else the way it is? [I think this would really be tragic.] There were three proposals. I don't know if you all remember that they have been looking at these proposals for a while.

Alternative 1 & 2: Bus + Pedestrian Walkaway + Dedicated Bike Lane + Light Rail Streetcar = \$80,000,000. If we actually needed a two-lane system with a second streetcar, it's \$90 million. Now these are probably low estimates.

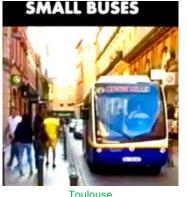
Alternative 3: Bus + Bus + Ped + Bike. The one that seems to make most sense to me is the double bus system with the bike and ped thing.



New Jersey Transit did something really innovative. For all alternatives, they have proposed extending the buses from Princeton Junction station directly to the Shopping Center. My gosh, wouldn't that be fantastic? There is is a little snafu there now with the one-way on parts of Witherspoon Street. Then it goes down to Valley. But the question I asked people, okay, that's a proposal. Should there be an alternative?

Now, here's what people told us: **1. We want smaller buses.** That was very clear. If we're going to put in a system on here we want a smaller bus. We don't want these big buses. So that's what people told us for that number one piece. Then,

2. What would the buses look like? Well, they're like these lightweight buses.

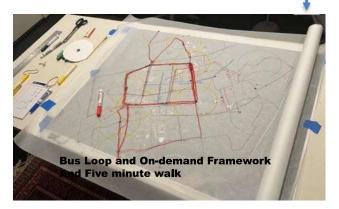


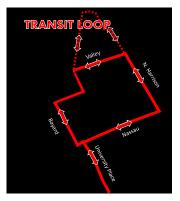


They're electric. They hold about 12 people. You can stand if you want. And, they're cool. They're easy for senior citizens like me to get on. Sheldon took pictures of the small green buses being used in Tblisi, Georgia. And, one of my favorite towns is Toulouse, France. Carlos and I have spent a good amount of time there. Small buses running through town works really, really well.

Where would you put the loop?

Here's what participants told us: 10 teams, Here's what it looks like on the synthesized drawing...







...and I'll walk it through more specifically. You can see that people had some deviations, but you can also see that the more times you go around, the more people thought that this was the right location for the loop to actually happen. And this is kind of what it looked like: it comes from University Place. It goes right onto Nassau, stopping at Palmer Square, Nassau Hall, Blue Point Grill to North Harrison and Jugtown, goes left, down the hill to Spruce Circle and the Shopping Center, Alice and Thanet. But rather than crossing on Valley, people thought it would be good if it went up to the group of medical buildings on Bunn Drive, and up to the top, it would be good if it hit Princeton Community Village [and, maybe alternately, PSRC & Redding Circle], then, come down Mt. Lucas, with a stop at CliffTown, then, come to the School Board & the Municipal Building, the Police Station, Pool, Community Park School, then, up Witherspoon St, going right onto Birch Avenue, and, then, goes left onto Bayard Lane back up 206 and down University Place to the Dinky Station. Super easy system. That's what it looks like. What's fascinating about this is that this hits almost all of the major spots in town. So!

Should we should we lobby for a continuous loop of some kind? To say "Let's get this loop in place as soon as possible." Okay, good! Here's something interesting. We, then, said, "Okay, here's that funny little five-minute walking distance", the basic of what we call the DNA of planning,

Should we lobby for a continuous two way bus loop?

Your response?



and people will walk that five minutes and if you have, as I said earlier, if you have a great sidewalk, they'll walk for 10 minutes, right? And the destination is a place and not just a stop. You have to make these places where the bus stops a destination. It's got to be a cool, interesting place to stop. Don't just put a sign at the end of the road that says "Bus Stop". And there's little or no wait. You can't wait more than two or three minutes. This thing has to be continually available as much as possible. And again, there's the little circle template. So I gave them two of them. You can use the outside as the negative or

the positive depending on what you want to see. So, now, what was fascinating about it, is that we looked

at... here's a typical example of that circle. So there's the five-minute

TO SERVE THE LARGEST NUMBER OF PEOPLE MOBILITY

- concentric circles of access
- 3 minutes optimum
- 10 minutes maximum

SMNUTE WALK

Nassalu and Witherspace as the center point

Beyond a 5 to 10 minute walk, people will defer to a car if..... convenient, on time transit is not available

walking distance that the circle but then if you had the 10-minute walking distance, you can see it has to do with where the stops would actually be located, in some form or another. So, here's what we put together.



We put kind of a polycentric destination here. We just used 4 stops:

And, then, said how much of the **4 areas** would be covered? the Downtown, Jugtown, the Shopping Center/Princeton North, as they're calling it, and the Civic Center/Pool area. But then we went okay, how many stops would actually serve this particular area.

This is the 6-stop route. You can see that one. By the way, it takes 20 minutes to go from Train Station around the loop. So, every 20 minutes, a bus go going to need as many as eight buses going around and round and round in order to be able to meet the numbers. Now, you might say "Well, but you need a driver for each one of those things". Well, maybe yes, maybe no. We'll have to see.

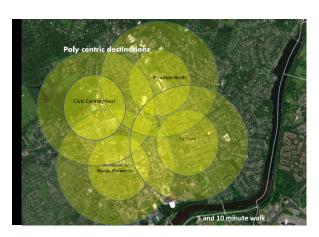


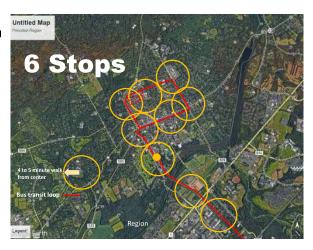
And then of course, the granddaddy of them all is the 10 stopper. And a **10-stopper** is the one that serves the largest number of people in this town.



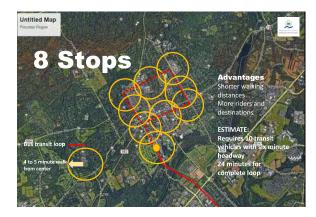
But, it would require two more buses to be able to do the loop over and over again. As I counted in the other day at the Hyatt parking lot, there are 10 buses sitting there empty right now. So, let's just initiate those into the process. Now. The key here is, it's a little bit longer around. But, if there are more buses, the stops are pretty reasonable.

This is the one that seemingly in our discussion...





Then there's the **8-stopper** and the eight-stopper, really it's a bunch of you walk far. Less. And this service is more.





the majority of people seemed to have favored this one. You see that how each one of these: schools; the medical groups; Cliff Town, Avalon... and then maybe, Valley Road or not.

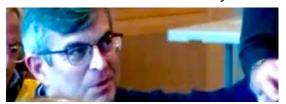
Now, the question is: Do you have a choice: a 6-stop, a 8- stop and a 10-stop. We have a question here.



Frans Coetzee

Sorry. I just had a question. I live in town. Sometimes, I am running late, and I need to get to, for example, the library. 10 minutes. I would walk. I was guaranteed to get here. I just wondered "Why not have a bus service to jump on/jump off? We could use a number of buses and we could get picked up anywhere along the road. So, if I'm going to a place and I am waiting at my stop and the bus is late...then, I have to make a decision. Do I start running? With such a bus, I'd just run along Nassau Street, knowing that when the bus comes, I can just grab the pole [London Bus] and hop on. One of the things with buses like the Freebie: the bus stops are so often bus and somebody struggles with their packages getting onto the tram. Trolleys in San Francisco work the same way: people jump on. There are clearly a lot of young people in town, so the bus would just slow down...people would jump off. You don't need to open a door. On a continuously circulating system... without having to stop, I don't know. You can get in your car and you know that you're guaranteed to get there in five minutes. Whatever happens. If there is a system with a schedule and stops. It's just another thing that you have to worry about. Will it come? Is there a delay?

Tony Nelessen: Well, I invite you to wait until a little bit further on because we think we've got an answer for you there: a hybrid that combines systems. Another question, here



Adrian Trevisan

What percentage of the population of the town are you serving there? It strikes me you're looking just at the core and allow the traffic problems comes from people living outside of that distance.

Tony Nelessen: I think when you actually if you look at the five-minute numbers. It appears that once you put the extended 8-loop or the 10-looper on the system, we will be serving an extraordinary amount of the highest density parts of the town. By far. I would suspect that we serve about 50 to 60% of the town, but hang on a minute because you're going to find out what other people recommended to deal with what we do you if you are outside the loop? So that's coming up, okay? So, let me continue on here. The question that was



raised is at and this why most of these systems fail is that people don't understand where it's going. Then, Mia said there is now an app. You can walk around with an app. But why did so many of the other transit systems work so well? One of the reasons is fairly obvious: they

POSITIVE RESULT WILL
ONLY OCCURE
WHEN A MULTIMODAL CICULATION
NETWORK IS
UNDERSTANDABLE

were on tracks. And when they were on tracks, people know when they're coming, where they're going, when they're gonna get there, and they're integrated with whatever this is. This is downtown Zurich.

I have 400 hours of transit films that I've watched and filmed. One thing is fairly clear.
We could do the loop with a bus. Now, how in the world do you do that?

Well, first of all, you must know: where it's going, where it stops, and when it arrives, and you can see the kind of the things that I'm going to be thinking one of the people



told me about, let's assume that there are 10 stops 1-2-3-4-5-6-7-8-9-10 Right. Now, what would happen and



this by the way, is an old, I think was the old freebie. I don't know where these, these little colonial buses went. But, the key factor is paint the lines on the street. Paint the lines on the street. Here's the orange bus, put the lines on the street like you do green for the St.



Patrick's Day parade, **paint the lines on the street**, so that people can actually see where it's going and it follows essentially that route. Now cars are going to be a little bit skittish: What's that orange line on the street? And it doesn't have to be Princeton orange either! The stop on Palmer Square is probably the best because you get off on the Square. Then so the question is how important is it that you understand where these Transit Loops go. I personally think it's really critical because you have to understand where it's going, when it's coming and the loop that it's

on. You have to be able to visualize this thing in your head. That's w traditionally failed. For PU to have an intercept parking facility there and then be able to get around the campus is just brilliant. We need to do the same thing. And, in November, you suggested there may be two spots where we could put parking intercept facilities for the town: one was just off Route One and the other one was closer to the Dinky station as you come into Town. You park your car and then you take a loop around Downtown. Now here's the big question that many of you have raised: How do we serve the rest of the town? Okay, we have the loop and remote garages. Can we find a technique to serve the rest of the town? I call it on-demand transit. Now, you may know it as Lyft or

Untitled Map
Processor Pages.

Transit loop and parking interface

Recommended local mixed use
Parking Intercept

Region

Region

TRANSIT THE 21st CENTURY

How do we serve the rest of town and immediate region that is not served by the local loop?

ON-DEMAND

TRANSIT

Uber or what have you, but I will suggest to you and just I don't mean to be bragging about this but this

system was first thought about by my firm in in 1993. And I wrote all these articles about it and went to all of these transportation conventions with the notion of an on-demand system that you could simply call it on your phone call it

up and it would say "Five minutes. I'll be there". Eventually, this particular article was read all over the country. And, in fact, I got a call from

Princeton University at one point, way back when, "Say, hey, we saw this article of yours back in '93. What's happened to that system?" Well, what happened? Uber was founded in 2009. It's exactly the same system except the distinct difference between Uber and the one that I had suggested is: Mine was 'point to point' which means that you figure out where the 'points', or stops are are and you walk



to that point. A 2 to 5 minute walk everywhere that's not served by the loop system. So, I just introduced this to the November workshop and said, "Well, you know, what do you think?" So here's what the conclusions were. The 'point to point' system was installed in Bergen County. We created transportation analysis zones. You can see them. They're actually out there now. We put 'a point' in the middle of each one of them, gave each one a number... When you called in, you said "I want to go from number one to number eight". And, they would say to you "two minutes", and the van would be there in two minutes. And I'll show you a little film clip of that. It's a bit corny, but I think you'll get the general idea. People would call it up, you would get in the van would drive you to a point... not address to address.

AUTOMATED VEHICLES

In September, 2019, Princeton Future held a workshop in this room on autonomous vehicles with PU Professor, Alain Kornhauser, Jerry Ye, Executive Director, CARTS, and NJIT Emeritus Professor, Reggie Caudill. A very hot idea.

What would it take to make Princeton an accessible community for all, even those who cannot or who choose not to own or drive a car?

Let's consider the capabilities of a transit-ondemand system, using several small vehicles, rather than a single large bus, that can be summoned by a smart phone app to a location within walking distance of a user's home.

What routes would be most valuable for residents most in need of this kind of transit? Developers of electric cars and autonomous vehicles are eager to apply their technologies to real-life applications.

Could the town, working with professors and students at Princeton University, leverage this interest to gain support for such a transit-ondemand system in Princeton? By reaching out to this technology sector now, we can become part of the ongoing discussion of how and when the technology is introduced to our community.



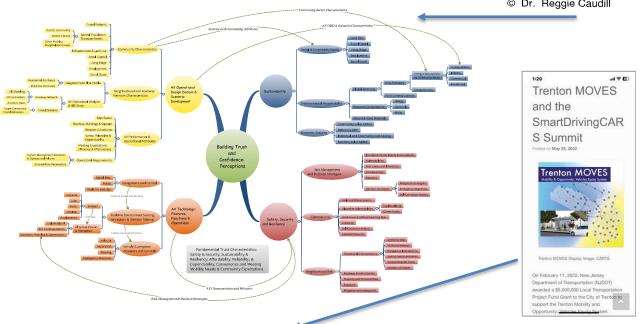
Reducing climate impact while improving quality of life. Princeton can model a better way.

PF, PO Box 1172, Princeton, NJ 08542



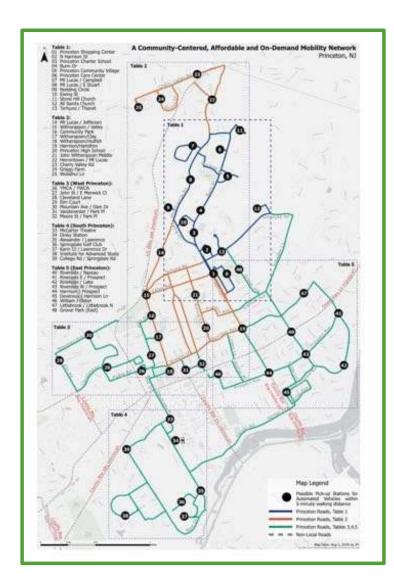
Building Trust in AV

© Dr. Reggie Caudill



[Editor's Note: NJ Governor Murphy & Mayor Gusciora are now sponsoring TRENTON MOVES as a way for the mobility-challenged to get around our Capital City.]

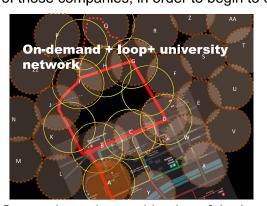
The question that I keep wondering about is do we really need vans that are autonomous? Or, do we now need a humanoid robot driving the bus? And that's an interesting question, which means you could recycle older buses if we needed to. Without having to put in a you know, an advanced transportation computer system as a process because



Possible AV stops for Princeton

Recently the University has negotiated a relationship with LYFT for its needs

now, as you know, Al is booming, and we could knock out humanoids. They could do just about anything. So anyway, here's what people told us. Okay, we showed the cars What do you think about it? We got 36 on demand points of where people thought these on demand points should go. And as you know, this is just recently proposed by the university with a contract with Lyft. I mean, it's just remarkable. Now remember the people the town thought about this, well, before the university expose this idea that, hey, maybe we could do that. So that if you're off the loop, and you need to get someplace in a real big hurry. You just call your 'point to point' van or you call Lyft, or one of those companies, in order to begin to do that. Here, I synthesize



that down because you've always got lots of overlapping loops. And, I think we came up with 26 or so that were within a five-minute walking distance. Now, here's what the two systems look like together. So if you add the loop going around and you add the

on-demand system, we've got almost the entire town covered. And it could extend to West Windsor. It doesn't make any difference at that point. It's an on-demand system.

So, you have the combination of the loop going round and round and round. All those kids in schools, **no more school buses**. **No more senior citizen buses**. If you're on the loop... or, if not, you're on the on-demand system.

Wow. We've got a whole town that is less 'carcentric'. Now, let's assume you're at the station. It's late at night and you want to go from your house to the station or you want to go from your station to your house. And it's after hours. Well, you just call this 'point to point' system. It may be that this system is cheaper because it is not dropping you off directly in front of your house. If you want that, you call another provider using its app.

When we were in Hong Kong, I fell in love with the Octopus Card, which means one card for everything. Just pop it in. One card for everything. So then, if we take any New Jersey Transit line, we take the proposal that people made in November for us to add NJT + Tiger Transit + Muni On-Demand all together. You're going to start to see that it starts to be pretty incredible in terms of the overlapping of the systems. This means we could actually do it. You got all those systems together. The question is, it is

Yes, there's some we got some good comments coming up.

Eve Niedergang, Member, Princeton Council

Do you have an estimate of how many small vans you'd use?

Expand to the region One app for all local transit





Tony Nelessen

a matter of coordination?

Probably, you'd start out with one then you'd go move to do we get more done and start with two. Then, you move to three. I think would have a small bus. I would probably start off with one. Set up the system, and say, "Hey, listen, I'm at RR. I want to go to VV". If that works, then you add a second, then a third. All these computer systems, all these satellites, and everything is running on the same, exactly the same algorithms. il's all there. And, all possible. I was at an event, and, of course the idea of expanding it to the region came up. I heard Experience Princeton, the director of that, the other day. It was really interesting that so many of the merchants are interested in getting more people Downtown. And, he said, I thought he made an interesting comment. Isaac said, "It's not that the rents are

high. It's just that the sales are low." Should we lobby for a coordinated multi-modal network together? Is this the way to go? We will really need serious lobbying for this. So, I'd like you guys to think about that. Now, we'll go to the more fun parts: the pedestrian, the bicycle and the street design. Yes.

Bill Moran

I live on Wiggins St. Isn't there a fundamental tension here that could be used to the advantage of promoting these ideas. And that is, on one side, we want to facilitate and move traffic, as much traffic as possible through the town, and, on the other side, we want to discourage that very same thing. This would accomplish both at the same time. There will be less traffic, thereby facilitating getting around quickly, and ,at the same time, giving more people access to go wherever they need to go.

Tony

Exactly. [It's not my proposal by the way]. I think it starts small, and **the more multi-modal happens, the less and less we're going see cars**. If everything got implemented, including the parking garages and the intercepts, you know, and you will have made the experience very positive. We would achieve what Marina has described as **the livable and lovable** kind of a town. I think this phases in over time. This is a 10-year thing. That's like, "Okay, can we phase this over a 10 year period of time?" I think you're right.

Okay, nobody's breaking. so I'm just going to continue on. The next, the Pedestrian Realm, I think is the most important one of all these things: Quite honestly, it is **getting people to walk.** How do we get people to how do we get people to walk more? The experience of walking in this town is already pretty incredible. And, historically,

Nassau Street with its 18-foot sidewalk is probably one of the biggest blessings that ever happened. And, now, Witherspoon St. is being expanded and improved with a wider sidewalk. I think that's a great thing. I mean, it's just amazing. When you look at the historic photographs of downtown Princeton, and you see the wide sidewalks and the number of people. At that point, there was

The Pedestrian
Realm
VITALITY OF PLACE IS
THE DESIRE TO WALK ON
POSITIVE, SAFE,
INTERESTING SIDEWALKS
AND PATHS



parking on the street. Farmers would pull up their wagons, back-in and sell from the sidewalk. The good news is that there are 20 dead or diseased trees that have been cut down. The sidewalks that have fallen apart are being repaired. I remember when we did the plan for Harvard Square and made it essentially pedestrian, as much as



possible. In 20 years, it wore out. It just wore out because so many people used it. We're seeing that here. There's a \$52,000 contract that has been awarded to Arterial to actually look at this. [In addition to the plans done previously by LRK]. And I would love to see that happen. And again, you can refer back to see the maps where the most of problem intersections are. And, then, across the board, where we did people think that new pedestrian priority paths could be. This was really interesting. One was Nassau Street, clearly from one end to the other. And, the other one: Witherspoon St. from one end to the other. And it's interesting the Town is working on and looking at both of them., but look at all the orange 'dotted' suggestions that came forward in November. There is

one priority, a really interesting one. The priority of a secondary pedestrian way parallel to the back of Nassau Street. And I just, I looked at this and I thought,

"Wow, this is really an incredible idea. Now, this is the piece we know right? You know the beautiful walk, but then what happens if it was extended [to Morven?] and to the Ys, going along on Chambers St... [BTW. Please take the parking off Chamber Street where the new hotel entrance is going to be! The three-foot sidewalk there just doesn't make much sense. Now look at that little red circle in the middle. I hear. Here's one that was done earlier, before the re-do of Witherspoon St. What



happens if we just extended the Pedestrian Walkway, but with paint, maybe. I just lived in Boston for too long

would happen if you just painted it on? And just painted this line on? Hey, follow the orange line. I don't mean to continue to use orange, but nonetheless, I think

it's a good color. But now, here's something really I find this endlessly

fascinating. Again, God bless the people who showed us all this stuff. They said well, could we extend it because he had Damali could you actually extend it and if you look at that that's already exist, except that goes through the obvious parking lot in town right now. But what happens







The way it is now.

IMAGINE!



What If? Entering from Witherspoon St.

if it really became greener? What If? Now, don't get shocked at you're about to see: These are doodles. You tell us that. Let's have a look at what might be imagined. That's what it is now. We have Witherspoon Street coming in. What would happen if we had glass-enclosed restaurants on both sides of that piece, and maybe a supermarket in the back with some housing up above?

On the parking lot the municipality owns. Now here's another one Dohm Alley. You know, PF has been working on Dohm Alley for a long period of time. I always find this one interesting. Why isn't the paving texture go directly



What If? Dohm Alley, looking towards Nassau Hall



Princeton Future STC exhibit in the alley today

across the street? Just extend the whole thing right across the street to the University I still don't understand why this one alleyway doesn't go all the way across the street? So what if it's a State highway. You know, there's no good reason why we could not do this. It is best to extend the pedestrian realm! If you walk along on Nassau Street, people stop and look down the alley. They think it might be interesting. But ,in order to get into Dohm Alley from the other end, the north end, you have to turn sideways and squeeze by 2 large trucks and the alley wall. It is just disgusting. And that big truck with a mirror can block your

path. So here. Don't be surprised that this one, this parking shed on the side there. I've never seen it full. I've been



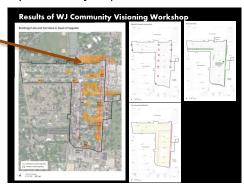
there 6-7-8 times, right. That's what it looks like. These are doodles right. It's another imagination piece. What would happen if we did something like this? There can be a green grocer in the back and it's all part of a re-configuration of the alley and the Municipal lot. We could use a space big enough for a good hardware store downtown! Here we could have bigger spaces at the bottom of this

building. These are just my just my 'doodles' to get you thinking. Let us just imagine what this might be able to become over a period time. Now that Witherspoon St is fixed up, we can put market lights across the top of the street and every Saturday, we can close it off for the Farmers Market. It becomes the space for the farmers market downtown, just by putting all of those lights across the street. Of course, it's going to be much more beautiful when the trees go in and the lamps go in. But the market lights would just be fantastic on that street. Now, the question is, should we do that? Should that be part of the Master Plan: to be able to extend the pedestrian realm in this way? Okay, let's This is more controversial.

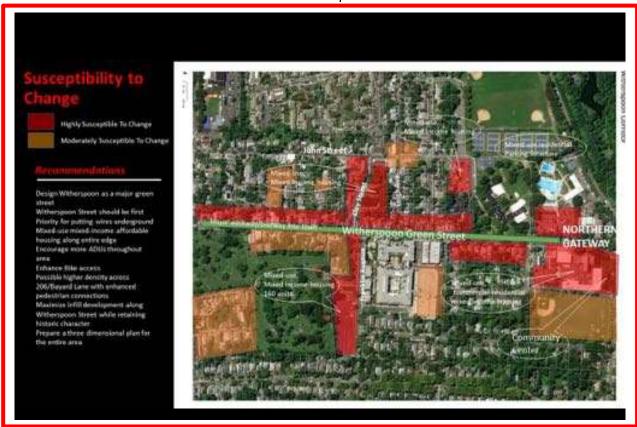


This has come up almost every workshop that I've been involved with who Princeton Future: **Should Princeton have a green spine.** And that green spine was first thought about when we had a visioning workshop the Witherspoon-Jackson Neighborhood. Now these are all the areas where this one street came up as a very important area for them. Here are

all the sites that they thought need to be redeveloped. Here are the dangerous intersections. Here are where trees need to be planted. Here is where the curbs needs to be replaced. That was all done by WJ community, which makes perfectly good sense. But when we did the **areas-that-are-susceptible-to-change** [STC], which Carlos will talk about a little bit, this was done by another



workshop. They said listen, "Witherspoon St. needs to be a Green Street" as it is coming along from the **Northern Gateway to the Town.** Princeton Future held 2 STC workshops:



one on April 30 and one on September 23. All the red is highly susceptible to change. The orange is somewhat susceptible to change. And people told us this that we did this is that something planners came up with but what was fascinating about it, is that when we synthesized everything that people had said to us, here's what they said. #1. The number one priority is to get the wiring underground. People want to see the street without all the wiring. I know we tried it on Bank Street. I know that to get wiring underground would have cost, just me and my wife, \$140,000! But, we also need to look at more trees, upgrading the sidewalks, adding texture to the street, limit the parking, improve bicycle access, add historic street lighting, much more housing, more retail and service cafes and gathering areas. I mean, people were just throwing these ideas out there! And, I think they were, quite honestly, a pretty extraordinary set of ideas. So, of course, we did 'doodles'. Oh, wow, hey, that's a street now. So what would happen if we did the curve Street? Well, that'd be kind of cool. What happens if we just would do Barker's across the street? That'd be kind of cool. And a bicycle path. And what happens if we create a waiting area for all those guys looking for work? But then what would happen if we just would



green it to the point where it was... and now it's you know, there's three people bid on this thing. I really thought that that is some of the ideas that people had were really good. So I made little doodles, quick, they're easy sketches. So

now, I ask: "Can we still have input on design?". I don't think so. Should the street have

electric wires placed underground? Absolutely, will it? No. That's the saddest part about it. They can't even do one street. I think this street is the most important street in town. Nassau St. is certainly important, but with this one street is the primary street and that's what people tell us. [Editor's thought: When the Municipality negotiates the license renewals for cell towers, it might be a moment to demand some help from those who profit enormously from all of the time we spend on our cellphones!]

Mia Sacks

I just want to say that burying the wires on Witherspoon St Street is the top priority for me. We spent many, many hours on this. We went to the top levels of the state: the Governor's office; our representatives; multiple meetings with the Board of Public Utilities; with PSE&G. If there was any way to do it, we would have made it happen.

Can we still have input on the design of this street?

Should this street have all electric placed underground, to enhance the view and green trees of the street, or is it too late?

It really broke my heart. We are doing all of this. We're spending millions of dollars to enhance the street. And, if you look up, when it is all done, it's still going to look like you're in jail. The way the system is, even starting at the top with the state, with the BPU... We couldn't do it. And, even and because there there's a commercial sector and all sorts of other stuff underneath the street. Maybe 10 years ago... there was a meeting in this room in which there were many Europeans who came to talk about how this is handled at the state level: the state prioritizes and funds putting the wires underground. If that's ever going to be possible in New Jersey, there has to be a widespread movement to lobby to change the system. I just want everybody to know. We did everything possible for Witherspoon St. It is really heartbreaking.

Tony Nelessen

There's really no doubt about it. On Bank Street, we went through for 14, even 20 years. We, too, went to the state went all the way up to down the line and lost. It would have been done if everybody could have agreed to put in \$75,000 on a personal basis. The only other alternative to me, and this is just a thought on my part, is to have them raise the wiring with huge poles, so it's well above the tree line.

Don't leave it in the middle of the tree line...to be able to get the visual corridor open is the best way to do it. If you could do that. On highways we do it. ...Yes.

Michelle Pirone Lambros, Member, Princeton Council

We kind of tried every which way. And because the wiring there

is so old. It's a completely different system than it is in the Downtown, where you have the wiring buried. The interfacing box for each building needs to be 10 feet off. This would put them in the middle of Witherspoon St. There would be a whole extra coordination to connect each and every house, every building, to the grid.

Tony Nelessen

I know I know that. The question is you can have you can't I mean the simple but stupid solution to that is 'So what,

put the boxes in the middle of the street, bury them, and pave the street and take the cars off! I mean, however you want to do it. That's all I'm saying. People would really loved to see the sky and the trees, and the churches on that street. Yes, Carlos.

Carlos Rodrigues, Princeton Future

Go off the grid. Go solar.

Tony Nelessen



All right, let me add the next piece. Bicycle & Scooters. Mia talked about that earlier. I must say that the **Princeton Bicycle**Master Plan is incredible. You know, we

spent a lot of time on it. Actually, in Philadelphia [I was really surprised how well Philadelphia actually did it]: They have created **one way streets as**







But here's what they came up with.

So if you have to prioritize basically, where would you do it?

Well, as you can see here, it is **Valley Rd**,

Wiggins, North Harrison, and Witherspoon Street.

That's almost the same loop as the buses. Again, the darker the line, the more people drew it. But, look at the

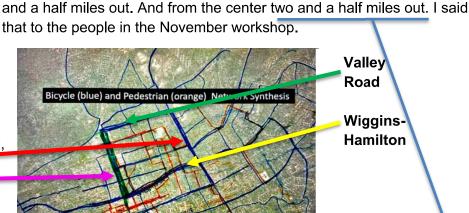
network. It's like a beautiful little spiderweb of bicycle lanes. But if you really look at the main corner: it's Wiggins-Hamilton Street. They tried a few years ago to put in bicycle lanes there. Neighbors objected. Now, we have too much speed on Wiggins.



A lot of things are focusing on Wiggins Street as a street that really has some issues. So, then, what we did is, we prioritized it.

And that's how it looks if you superimpose it on the town itself, knowing that the bicycle network is there. Where would you

put the bicycles if they had the first priority? Now we know that North Harrison Street is going through a study. The Town has hired a group to do that. I think Mia indicated that they're certainly going to do it.



opposed to two-way streets. But the Master Plan for bicycles is beautiful. It shows all of the recommendations that should be done. I would further suggest a simple notion: A typical, very good bicycle network will reach out from the center point about two and a half miles. That's what John Pucher, THE expert tells us. You have to do it inward from two

> Valley Road

> > Wiggins-Hamilton



Elise Petterkian

You have to be careful of the children going to school. I believe there are many children who go to school. Right? [Editor's note: There are 3,984 students in private schools in Princeton and 4,076 children in public schools.] My daughter was hit by a car while going to school in the morning. There is this problem which is independent of that accident because it touches everybody: There is this problem of the highway crossing the middle of the town and separating the East and the West. 206 is unacceptable. And if you are going to have a serious master plan, you have to move that highway somewhere else! It cuts our streets. All the kids on the west side of 206, they can't walk to school. Now, my child can't psychologically, she can't walk to school anymore. She comes back she was on a bike and everything because she did everything perfectly. She waited for the car on the left to stop... but, on the right a car didn't stop. They come down from Nassau Street. They stop at the first red light. And, next, there is a flashing light and they think they are free. You know, it's a town that is totally dedicated to cars. We have to take a much more radical approach to do something. I mean, it's a question of life or death. A dog died...hit by a car, a few days ago or so. It's a dog, but it could have been a person. The Witherspoon-Jackson Neighborhood is crossed by this highway? I can't understand that nobody has ever highlighted this. This is very, very dangerous situation.

Tony Nelessen

I don't think we're going to get a chance to relocate 206. Okay, there were a couple of other hands back.

Frans Coetzee

I'd like to point out point out one thing: a certain amount of car traffic has to go along Wiggins. It is more dangerous for bikes. If we lower the speed limit, people will disregard it and move to side streets. I want to say one thing about the bicycle route overlay. There are a couple of streets that are clearly high traffic: Harrison & Wiggins. You use them when you want to get from one side of town to the other. You go on those main arteries. Cut them off. People are going to cut through. I don't see why bicycles have to overlay on cars... or if you move it one level. For example, on the tree streets, like most bicycles, you could separate the kids from these things.

Tony Nelessen

I fully understand what you're saying. Look at the fine grain of the network. And again, I just asked the 10 teams, where would you put it if you put it now I know that Harrison Street is going to go on a diet and if you have a clear bicycle path on it ... if you have a clear bicycle path that is separated from the traffic, it's fine. But, if you're mixing with the traffic, it's a problem. Let's say Wiggins Hamilton. If the parking was taken off of one side of that street, you could put bicycle paths on both sides of that street. The trouble is, parking is still the sacrosanct thing. This is the big network that people said... I think it can be designed to make it safe. But look at Witherspoon. Not only is it a Green Street, it also has a major bicycle path on it. And of course, if you really look at this network, the High School, the Middle School and Community Park are on the loop.

Littlebrook and Riverside are linked to it. It's just something that I'm just telling you what people have told us from the workshop now.

Yes.

Chris Myers

I live on 673 Prospect. We used to live on Kingston Road. I love the idea of more bike networks and I just wanted to point out one thing. You have it up there, crossing over Princeton-Kingston from Prospect Extension to Poe Rd. That's a really dangerous intersection. I've watched so many accidents happen thereover the years. If the bike path had, you know, a small kid going across, it has to be safe for kids, right? And so traffic calming, cameras, speed humps. I know it's a State Highway. I share your view. But don't create a bike path that isn't safe. Crossing dangerous intersections is very hard work.

Tony Nelessen

Well said. I didn't actually look at the bike network and then go back and overlay what people thought were the dangerous intersections. We should put those two together. This is what it all looks like with all of

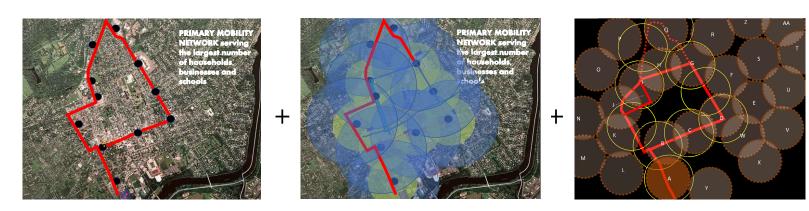
the overlays on top of each other. It is a very important and a very big job to be able to

coordinate all these things, the SAFETY of the intersections, the bike, the transit system, the loop, the pedestrian improvements. To me, this is really like the most extraordinary drawing. Now this young lady, maybe right: maybe we didn't get the

whole town to do this thing, but I think I'm just telling you what people said. And, I think that there's enough information here so that if they're going to hire yet another consultant for hundreds of 1000s of dollars to do this, THEY MUST LISTEN VERY CAREFULLY TO THE PEOPLE WHO LIVE HERE. A lot of this work has already begun to be thought about. I think this work might be a good take-off. I would be really disappointed if all of the things that are being talked about with you guys today are not included in the actual plan and eventual implementation. I think that in order for Princeton to become a really special place... [As you all know, everybody loves this town...I'm living here... you're living here]. It could be something even more incredible. And the

University has shown us the way! Everything that they've done over there is absolutely correct. From the solar to the geothermal to the cars to the parking to the circulation system, to the good landscaping to the decent architecture.

The Community of Princeton and its Government, with the help of Princeton University, must adopt a holistic Mobility, Circulation & Parking framework to achieve: our future goals of optimum sustainability; housing that allows for inclusion; a compelling market advantage for our businesses to prosper; and the overall quality of life of our residents! - Tony Nelessen



And, on that side of Nassau St [what I call "The Kingdom"] over there is very different from the rest of us over here in town. I just think that there's a possibility, if this is what the people want, and, however you tweak it, and maybe, there are lots of tweaks that have to happen in here... But, this gives us a foundation and a framework on which to plan and build. It is as simple as that. Here are all the pieces overlaid on top of each other. Here are the things that people said. I think it's understandable. If I look at the question that was asked earlier: "How many people does this work of Princeton Future serve?" The answer is that you can look at that five-



minute walking distance around the areas for the bicycle-ped pathways and the transit loop that we have

discussed... And, then if you add the 10-minute walking distance around each circle, nobody is going to have to wait more than two to three minutes at the transit stops. Please look at how much of our Town we have covered. And, then, as necessary, if you overlay the on-demand system on top of this thing, we have everyone covered. Yes,

Eve Niedergang, Member, Princeton Council

Sir. I just have to say "On the other side of Nassau Street, it's not a democracy!"

They decide what they're going do and people fall in line. That's not how it works on our side of Nassau St. I called it a complicated process also. I mean, you're talking about transit. The University has just invested a fortune in these large electric buses that have a long lifespan. That's is now something that has to be incorporated into the planning to the extent that they're ready to share that with us. They're not going to replace those in the next two or three years with smaller buses. There are there are facts on the ground that we and you know. [similar to the burying of the wires on Witherspoon Street, not an option we have]. I think this is a great presentation, but I think we need to focus on what's possible. The university has bought those big buses. They're there. We're not going to bury the wires on Witherspoon. let's focus on Molex can't

Tony Nelessen

Somehow or another, if we had enough money, we could do it. But, we can't because we don't have enough money to do that. Okay, we're going to have to leave the wires up there. We're not asking the university to give us the new buses. Why would we do that? Right? Now, I just from the bottom line, they have all those surplus buses sitting out there at the Hyatt. Surplus. Written off their balance sheet. They're not they're not the electric ones. But they're all sitting there. The question is "Could we actually implement a trial loop because they've already amortized the cost of those buses?" I don't know. You guys are negotiating with the university. On the other hand, let's assume The Kingdom is just The Kingdom. They will always be The Kingdom. They will never really give us much. They give us what might be called "Tips", right? But meanwhile, we have all of this stuff that's has to happen. In fact, you know, imagine with one grant...a big amount of money that might come from the State to do this. We know the Town can't afford to do this on its own. The question to be answered: "Can this thing be financed in some way that it would be viable? I think that's a really legitimate question. But I would tend to think that The Kingdom is going to be The Kingdom. I'm not asking. I don't think we should ask. Because, so far, The Kingdom acts like The Kingdom. Right now. We've got to figure out how we're going to do this on our own. Yes,

Mia Sacks, Princeton Council

I just want to put in a more positive spin. One of the things I love about Princeton is that we have so many residents who think big and are very optimistic. And one of the most challenging things for us on Council is that we also think big and are visionary. It's often very frustrating to deal with the slow speed of NJ State bureaucracy and the financial implications that that constrain our vision. That said, everything that you've articulated today and the vision that you've articulated today is absolutely the vision of the current Council. In the Transit Committee, we've been discussing, you know, everything that you have discussed today. It is our vision. We do have a positive working relationship with the University right now, in which we share their vision. We're a little bit behind, but we're interested in catching up. I don't think that there's anything articulated today that is pie in the sky. You have a Council that shares your view of this and is interested in implementing it. The only real obstacle is that people who, for example, I didn't catch your name, but we need you to come to Council meetings and speak up. Everyone who is here. Please come to Princeton Council meetings and speak up. It's not enough to just come to a Princeton Future meeting. I mean, you talked about the 14% that are always negative. The 14% always show up at Council meetings! Everything here requires staff time, legal time, and financial expenditures that require choices at the Council meetings. We need public backing. We need our constituents to advocate vocally! In writing..but give your voice, verbally, attend meetings, write letters to articulate and describe this vision. This is a comprehensive

vision that many in the Town don't understand. They don't understand that the things that they're complaining about the most: about parking and traffic congestion!. They actually oppose moving forward on the very thing that would solve the things that they're complaining about. And they're stuck because they don't understand the big picture that you've so eloquently presented today. And that's what we as Council members need your help, the help of Princeton Future. We need your help with helping to get everyone to understand how it can work and then advocating for us to represent you. Because this is truly our vision. Okay?

Eve Niedergang

Sorry, I didn't mean to be negative. It's just it's hard to be compared to the University when they have, you know, virtually limitless funding... and, also, the power to just say "We're doing this!" So, I think everything [except, you know, integrating the transit system with small buses everywhere. And the underground wires on Witherspoon Street] is all really appealing. So I didn't mean, in any sense, to be negative.. I'll be with you in just a second. If somebody in the back who's raised their hand for a while.

B Laud

So, first of all, I appreciate Princeton Future for holding these sessions. I also appreciate the Council Members and others who are here. But, I feel that I'm edging very close to the 14% that you spoke about. And, it's not like the old Groucho Marx song "Whatever you're for, I'm against it!" The problem is, I would like it if someone could even answer, right now, here, while we're making these very positive plans. Why is the University allowed to cut back a bus stop? One that has probably been at the head of Witherspoon Street and Nassau Street for probably 90 years and a stagecoach maybe before that? And, why are they cutting back the public's railroad? Those are not positive things. We also have a Memorandum of Understanding [maybe 'misunderstanding'] regarding the contract the Dinky Line. And with the congestion on Nassau Street, are there any plans to ask the university politely but firmly? "Are you going to make good on some of those MOU proposals that we were promised?" So "Yes! to the University is a great resource". Many of us have some connection or affiliation or other with them, but we need to also hold them accountable to preserve what we already have. Before we get on to the bigger picture.



Tony Nelessen

I went to pick up my ticket at the Kiosk and looked across the street and asked "Where's the bus?" I mean, it has always been at the front of the University. He said, "Oh, no! The University was objecting to 'those people' who hang around the bus stop and go to New Brunswick. So they moved it a block down the street. I said, "Are you serious?" He said, Yeah, that's going to happen and I went, Well, maybe that's just a rumor in town. But yeah, I was really surprised that it got moved. And by the way that people who went with me on the bus were all folks who live in New Brunswick, so you know.

Anon: I think the merchants also wanted parking spaces, probably.

Tony Nelessen

Whatever. But, now you understand the rumors that are going around about that. You're right. **The Kingdom gets what the Kingdom wants**, but, on the other hand, it's pretty clear that this town is really special because it really has so many resources and so many fascinating people. The question now: "It's just the coordination to make it all happen. And anything that happens by way of this vision is a positive benefit to the University. And, whatever the

University does will, hopefully, become a positive benefit for the town. And they clearly have done a remarkable job in many ways. Yes.

Michelle Pirone Lambros, Princeton Council I want to speak a little bit about the bicycle path.

Tony

Sure, of course, no problem.

Michelle Lambros



There is some there are some things underway. First of all, on Witherspoon Street. It's going to be a 'Bike Boulevard'. There will not be separate bike lanes. There will be traffic calming measures that are going in, along with raised crosswalks and the like. A bit of a road diet to extend the sidewalk. It's a very narrow street, so there was not room for bike lanes, unfortunately, at this point. So, just a bike boulevard. There was a lot of discussion. We all advocated to try and have bike lanes as much as possible. But, right now, that's the situation, in a bike boulevard with traffic calming measures should work well. And, we have already lowered the speed limit. Now, on Wiggins-Hamilton, we did a study four or five years ago. And the study also called for a lot of traffic calming measures. So it's it's a lot of money that needs to be spent. We definitely have it as a priority. And it's something that we're going to continue to look for Federal and State funding grants. We did get Federal-State funding, by the way, along for Witherspoon Street. These are extremely expensive streetscape programs. Mia mentioned earlier that we're working now on the study for Harrison Street. And the other thing I was going to mention too, is that we recently brought on board a consultant for Nassau Street to do the streetscape. And not only are we going to look at doing re-doing the sidewalks which desperately need work. But, we've also added in there to see where we can possibly put bike lanes on Nassau and then as you didn't have them as a main priority, but it's another East-West corridor, where it would be really essential and wonderful to have some type of bike lanes. So, we are going to look at that.

Tony

Yes, you can see it's one of the lighter lines. I think people were kind of concerned about that, but that's why I was quite surprised. You can see the extent of **how far Wiggins actually goes out**. I mean, they was really clear that Wiggins should probably have, you know, **limited parking** on it. And there are a lot of people who would call in...but it's wonderful that this is all happening. What is most important quite honestly: When people go through this process of developing these plans, one of the keys to these plans is that you **have to get a first phase implementation** of something, rather than leave it lay too long. Also, people just kind of forget. You really have to say "Listen, we're really doing this and we're going to celebrate it. We're going to open it!" I think that becomes really important.



Now, let me just finish this up. And then I'm going to turn it over to Carlos to talk about the next phase. The thing that we know is that we're not going to maintain the existing status quo. I mean, we can't. It's just that things are changing too fast. Electric cars are a big deal right now. Right? And it's just going to mean more parking and more charging demand. And you can see it down in the Municipal lot. We've already got three of them down there. The bicycle utilization, if we did it, would certainly do that, less parking demand less cars, to pedestrian network. would even be better in terms of high-quality neighborhoods and community and less parking. But really, it's really looking at all the sidewalks in the entire

network, everywhere. Every street crossing for every kid... every bicycle crossing. Then you get the transit stuff, which is probably the biggest one. If we put the transit loop in and it began to work, I think you'd see a significant reduction in parking and local traffic, and then the on-demand. I mean, just continues to increase it. So I think the

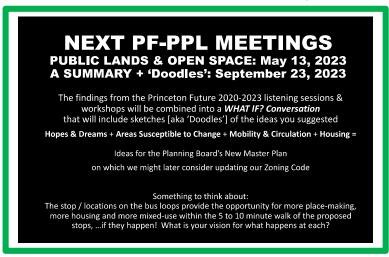
combination of all of these things starts to make the largest amount of sense as to what people told us.

Would you use the system?
How could we use the system to serve you?
What could we implement in the immediate future?
Can we generate a consensus?
Can we get community recommendations implemented?

These are some of the questions. Mia said people have to show up and start to lobby for these things. Maybe you can become more proactive! Begin to make it a habit. If you sit back, you know, it's just going to take its own course. And, right now, "the powerful inertia" is to continue to have the parking problem. Let the status quo be. We all know, however, that is not possible. Everything is beginning to change. All you have to do is look across at The Kingdom. It's all over there already! The question is not that the Town needs to catch up with The Kingdom, or "How is that done in a negotiation with a \$32 billion organization, that is in our Town, just across the street. Seems to be fairly logical, but you know, that's not my place to be dealing with it. But when you look at all the pieces, it was a really a pretty remarkable workshop in terms of what people told us. [APPLAUSE] I mean, it was really very, I was very pleased. So Carlos wants to come up and talk about the next step, but the next part of this session, or the next one is going to be open space. But the next part is probably going to be the interface between susceptibility to change, and transportation, and housing. And we're going to try to put all of those together at the first workshop in the fall, September 23. Now, one of the things we want to do is synthesize all of the listening workshops we have held over the last 2 years:

Hopes & Dreams + Areas Susceptible to Change + Mobility & Circulation + Housing = ?

Princeton Future has lots of what we call 'doodles', more of the little sketches that you saw today. We have 100 more of them. We will say "Hey! here's what you told us. Can you imagine what it could be?" Here is a visualization to get you thinking. It may not be exactly that but it's doodles to give you an idea of what people told us. We're trying to translate what people told us into some kind of a three-dimensional reality.



So anyway, Carlos, you're up. I have, sorry, someone here wanted to say something. Okay.

Shirley Chen

I've been here many years longer than I like to think about.. So first of all, I didn't quite understand your loop. Is that one way or two way?

Tony Nelessen

Two way.



- 36 - T

Shirley Chen

If you have only small bags or a carry-on, it might work OK. But, if you intend to take heavy luggage going to the train station & airport. It's just not practical. Even walking five minutes is not so easy because the sidewalks are poor and some streets don't even have sidewalks, to drag along those heavy suitcases. It's a different issue. But it's a practicality that needs to be addressed. On the parking, if you can. This is more theoretical. Say underground parking. But are you aware that Princeton, underground has flooding? And you have a power outage, the pump won't work. The Spring St parking garage...it took a couple of years before they got to the basement system working well. At the beginning, they blocked off the basement because of flooding. The point is that there are a lot buildings out there already. You can't easily change the foundations. Right? So that's a practicality issue. Now, in terms of bicycle, my husband rides every day. He always wears a yellow reflective jacket. The problem is a lot of people don't wear something reflective. They wear completely dark clothing in the evening hours. They problem is many don't even have a light... On campus row, I have been knocked over by somebody on a scooter. I was

just getting off and Witherspoon Street... I could pull over & I could get off...But o the guys were coming down the slope and I almost got knocked over. I just barely managed not to be knocked over. Those are things that you have to implement: some kind of **rules for clothing, warning things and lights.** Or else we're going to have accidents all the time. So we have just had too many close calls.



Carlos Rodrigues, Princeton Future

I'm a professional planner. I live in town. I've lived here for a while. And I literally have almost nothing to say. So, fear not. But what I do have to say is: We have had this presentation, which focused on mobility right now. There's the other side of the coin. That's land use. If you go to any planning school, any decent planning school, you soon learn that the connection between land use and transportation & circulation is... That's the entire game, That's the alpha and the omega of City Planning. You get that right. It all falls into place. You get it wrong. You get what we have out there. So, it's something to pay attention to, very close attention to, now, especially folks who have something to do with planning in New Jersey, The Municipal Master Plan, as outlined in the municipal land use law [MLU] has a list of 'elements'. Some of these are mandatory. Some of which are not. The land use plan element is mandatory because it's the basis for the zoning. The circulation plan element is not mandatory. There isn't anywhere in the municipal land use law that says that you need to align your land use plan with your circulation plan. That nexus doesn't exist legally in New Jersey. And you know, I'm out there, many nights a week, at hearings all over the place on planning issues. Nobody is connecting the dots. So, the dots do need to be collected. One of my first planning assignments when I was still in architecture school. The school was doing ridership forecasts for the Lisbon subway system. Now, we didn't have computers. We didn't have GIS. We didn't have any of that stuff. It was all done by hand. But we did have very granular data on transportation. We knew with a high level of precision what modes people were taking to go places, which is not something that we know in this country, right? You go to a planning board meeting, you have a traffic engineer testifying. They'll testify about the number of trips, vehicular trips in and out of the site, and then where they're heading. Right? Eastbound. Westbound. North. South. Complete guess, complete guesses, maybe an educated guess. But, we know even less with respect to pedestrians and bicycles, we don't even count them. So we're a little behind. We're a little behind. But the main message is: if you don't put the two pieces together this circulation system, the transportation options, and the land use in a way that makes the mutually reinforcing, you're going to

lose the game. That's what needs to be done. And so not our next session, but in some session later in the fall, we will be trying to tackle this rather thorny i ssue at some point later this year, perhaps in November. You're welcome.

Katherine Kish, Princeton Future

Carlos just alluded to a presentation. We're going to have another session



on May 13 on PUBLIC LANDS & OPEN SPACE and I want you to know that everyone in this room is invited. Everyone in the town is invited. People in the region are invited. Our meetings are always public, and we always want to see as many people with as many opinions be stated as can. We are so lucky today to have had not only Tony's wonderful presentation, which reflected so much of what you said, but also to have Ms Sachs, Ms Niedergang and Ms. Lambros here because, as they as they have all said...The political side of this... the people who want to want to help the town grow and prosper, need to hear your voices. And they either need to hear your voices here at a meeting like this or maybe more importantly, they need to hear your voices at Council meetings... Stop them on the street and talk. They want to be politicians. They want to be political leaders and they need to hear from you. So, we're talking today about participatory democracy. And, that's really important. So just look around, identify the people who can make things happen and talk to them. Talk to them. Don't be shy. Don't be just the 14%. Come out and state your opinions. We will be meeting again here on May 13. And we will be dealing with a little bit of land use: PUBLIC LANDS & OPEN SPACE, and we have Cindy Taylor, the Open Space Manager of Princeton, coming from the town. So the land use subject, in general, will be a complement to what we heard today. Then, on September 23, Tony will cover it all. I want you to remember the most important word from today is coordination. It's coordination with the municipality, coordination with you, the town citizens, coordination with the University, as Tony referred to it "The Kingdom". But there are many kingdoms here and one of the things that's wonderful is we have a town here where people are truly interested and people are not shy. And that's very, very important. So, speak up. I also want to alert you to another meeting that's coming up on March 18, which is next Saturday. From 10 to 12 at the Municipal Building, and it's a community roundtable

about the Princeton Theological Seminary, development and future. So as far as I know that too is an open meeting and you are invited to that. But you will be seeing you will be seeing notices on our May 13 meeting. And Sheldon, is there anything else we need to announce?



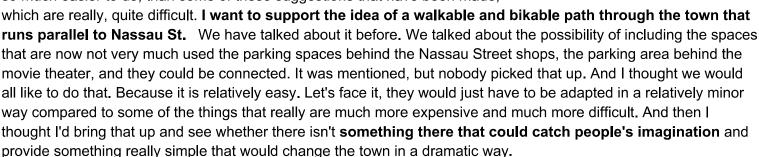
Sheldon Sturges, Princeton Future

I was just going to suggest that we're a little early. There are a lot of people in this room who have not spoken up and that's unusual. Peter, you haven't said anything! Michael, you haven't said anything! Anyway, I would hope to have more people ask questions. Tony is here and this is a very important subject. I'm sort of surprised. You know, with the housing meeting, the room was jampacked. People don't seem to rally around the word "circulation". It doesn't speak to them. We also have our wonderful new friend,

Isaac Kremer, who's come from Metuchen. He'll be running what was first called that Princeton Business Partnership, and is now called **Experience Princeton**. He's here and I know there are many of you that have points of view.

Peter Lindenfeld

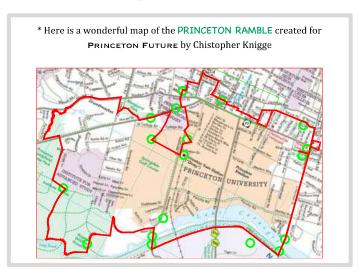
Sheldon, one of the things that was peripheriy mentioned today which I think is so much easier to do, than some of these suggestions that have been made,



Sheldon Sturges

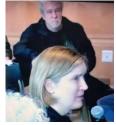
Thank you. That happens to be something I think is a really good idea... that we might call the Princeton Mews. A

really good idea for a walkway, from The Graduate Hotel, across Palmer Square, by all the backs of all the buildings along Nassau Street that could be opened up into little cafés and shops filled with beautiful flowers, secondhand books and lots of curiosity. It would be a fun way for people to enjoy the town. And, if we really grow up, we could have something called the **Princeton Ramble***, which is a two or three-hour walk from the Mews to Quarry Park, to Harrison St Park, down South Harrison St. across the bridge, along the Tow Path, to Turning Basin Park, over to the Charles F. Rogers Wildlife Refuge, to the Institute Woods, back up, across the Battlefield, through the Princeton Seminary, Einstein's House and across to Morven. That would be a great thing....sort of a Cotswold Walk. Anybody else? Here is Christine Symington of Sustainable Princeton.



Christine Symington, Sustainable Princeton

I know it helps me and perhaps others, Tony, when you do the visualizations that you do. Your 'doodles'. The images that you show are really important because I think, often times, we talk past each other, at cross purposes...But, when we see things visually, it's much easier to have constructive



conversations. And along those lines, I hope you're planning to do more of those walks that you had organized earlier. Walks to Coffee, I found those very helpful. I want to put in a plug or a request that you schedule some more of those. We could take along on some of those doodles as we walk. Tony does a really a good job of visualizing, and, you know, to walk with people through those areas and show some of those images. That's a request.

Sheldon

Good work! Well, who are you?

Bill Gray

Of Bank St. We've mostly been talking about the hotel with Council. We're pretty active talking about that. And I think Tony mentioned the traffic study that was from 2014 or 2015. We are inundated with scooters electric scooters that go very fast, mainly from The Kingdom. I think they have to be integrated into the planning now, rather than waiting for a study that costs money and takes five years.

Brian Levinson, Friends of the Dinky Corridor

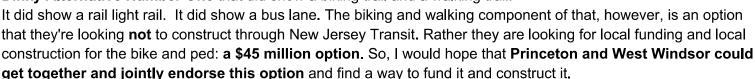
I know we mentioned the Dinky before and I think that alluded to a local organization. So, several months ago, we started a group that is called **Friends of the Dinky Corridor**. And, we just wanted to express support for the initiative that New Jersey Transit was putting out there to improve access between here and Princeton Junction... but, also, **making sure we get pedestrian and bike** access over there. I think it's really important. I work in the Junction at the West Windsor High School, right nearby, **and I can't get here**, and it's only three miles away. And I've got a whole bunch of high school students that I'm sure would love to get to Princeton and don't have cars, and they need better and safer ways to get here. So, thanks.

Sheldon

Thank you for coming. Brian. Michael, did someone say you usually do? No. All right. Anybody else, Jerry is the bike man.

Jerry Foster

Thanks, Jerry Foster, Princeton Junction resident. I'd like to **second the Princeton Dinky Alternative Number One** that did show a biking trail and a walking trail.



Katherine Kish

We all need to think about how **Princeton is the Center of a Region** and many of us [I live in Cranberry]...any of us come from the region outside of Princeton, but think of Princeton as our downtown. So that's an important way to be thinking okay, here more questions.



Larry Filler

I live in the Jugtown area. I just want to say the presentation is really impressive. The operational and infrastructure ideas, I think really, are great, but one element is not included very much. You made a reference to painting orange lines along the street for directional purposes. I think information is extremely important to make any improvements, particularly transit improvements successful. There are a lot of new technologies, as well as existing technologies, that you can use to allow people who are actually at locations to know when something's coming, where it's going, even fares and so on. I think that needs to be a central component as well of this project because many improvements around the country have been done. Many look at the infrastructure and they look at the operations but they neglect the information. And that leads to a decline in usage and low awareness. For example. I think it was cited that there's a Trip Shot, app. I think virtually nobody knows that because applications are good, but only certain people use it or are aware of it. And you really have to use all communication channels to make sure that people in the community really are aware of what's available, as well as a situational informational system. Yep. So that people will have the ability to actually know where to go, when, when they need to go.

Katherine Kish

And so just when Mia mentioned the **Trip Shot app**, I pulled out my phone, and I put the app on my phone it is there. So, if you haven't done it, just go to Trip App.com and take a look at what it gives you.

Tony Nelessen

You know, you are completely right about the whole idea of the information piece of it. Knowing when it is coming, where it's going to go, how long it's going to be there, and what it costs.

You see this all over except here. I have a whole series of movie clips, but I

thought we'd never get done by 12. So I didn't put any of them into the presentation. I guarantee you they'll appear the next time.

Catherine Knight

I am a resident who lives on Nassau St in the Jugtown area. I just wanted to point out a couple of observations about the traffic near my home and in front of my office, over Redding Plumbing. There are a lot of children on bicycles in the mornings in our neighborhood. I was worried at first... like "Why are they riding on the sidewalks?" But then I was told by a mother who said "Well, where else can they ride?" It's really

- 40 -

true they can't ride on the street, on Nassau Street. I love the fact that our town is comfortable enough that the kids ride their bikes to school. I love that and there's a lot of them. But, they're on sidewalks and it's dangerous. So, I'm glad this issue is coming to light. We really do need to do something for them. And, then they turn onto Chestnut Street where my office is. There's just a lot of them in the morning! So, that's just one thing. The other thing I wanted to say: the Harrison Street - Nassau Street intersection is very dangerous. It's very narrow there and we've noticed that a lot of people run the light as they're coming south on Harrison. It's a very short light because from the other direction, they get a left-turn arrow and they're coming up the hill and somehow, when it turns red, they think "Oh! I can get there. I can get there." ...and they go through the red light. So, the curbs have a lot of buses that go across them. If you just look at the corner, you can see how many times traffic lights have been knocked down [two or three times in the time that I've been there]. So, it's a part of our loop which is critical, but it's a very dangerous intersection. I just wanted to note that observation.

Bill Moran

Moran again, two quick items. I know we don't have the resources of **The Kingdom**, multi-billion dollar endowment, but I believe that state allows a municipality to have a **Municipal Development Corporation**, which could be bond funded, which has a lot of advantages and a lot of possibilities. Someone maybe we could look into that. The other

thing is more practical on Wiggins St. They said it couldn't be done. But they did it Witherspoon Street in now one way. **Could Wiggins St. be one way?** That's from Moore St. to Witherspoon St, the actual Wiggins Street? Think about some of the problems that might solve.

Frans Coetzee

Bicycle riders, school kids are our 'customers'. I think we should look at where they go. And just like you say. I have a son, We rode on the sidewalks. We went behind the streets or putting bike lanes on weekends. On Harrison, I keep going back to that... There are a lot of really good streets that are not as heavilytrafficked. For instance, Princeton Avenue, Aiken Avenue: the kids know them. In the mornings, you can see them coming down our street. What causes a problem in Princeton, there is no crosswalk. Crosswalks are in the wrong places. The other thing is: We have wide sidewalks. Lots of streets have two sidewalks. One of those sidewalks, like Amsterdam, is quiet and untraveled on the right side of the street, so bikes can easily go on the right side of the street. The pedestrians go on the left side. For pedestrians, you paint the left a color, say GREEN. And, you paint the right side another color, say GRAY. Why don't we just do that on some of these streets? We can start to funnel. Instead of building expensive bike paths and taking away parking: a simple thing. The kids. Look at where the kids are! They like to congregate. They like to travel in groups. Let us promote the streets that are not as heavily trafficked. Regarding information. About the apps: something that's low cost. Put a QR code like the Princeton QR code on every sign that goes up. These apps change all the time. What was in use last week, it's not in use next week. Simple website. Snap, or whatever, the current app is for the Princeton or Tiger Transit, you just go to it with the QR code. It immediately takes you to the app that you want. So I think there are some low cost things that can be done to improve things pretty easily. My last comment. I like this idea of

[JoJo Unintelligible]

circulate.

I am a resident at Canal Pointe. I wanted to echo the point made about **consistent bus schedules**. And I think that any sort of land use planning should incorporate the low-cost solution of making the bus schedules consistent.

point to point. There's one small bus to Downtown Princeton, five people will monopolize it. I think whatever needs to be done, needs to be done well. I propose a small step: that you ask for feedback. When one bus is going around, it is a great thing. It takes 20 minutes to

Studies show that that's the only way to really keep ridership growing. We need to have scheduled buses that come on time. I find that the NJ transit line is the best way for me to get to Princeton from Canal Pointe, but it's often delayed and so that discourages me from riding it and I end up using my car which contributes to congestion here. It's just not the best. I think the low-cost solutions are worth focusing our time on. If we're to take on the grander projects like the Dinky and all of the

Stephanie Gray

Hi, thank you, Stephanie Gray. Tony, thanks so much for all those great images you shared with us. One in particular kind of struck me and that was you know, I live right here, in Downtown Princeton. The buses are empty. I work and have worked in the transportation industry for 35 years. I'm just wondering, the genie is out of the bottle, so to speak, and I just wonder if, within a certain distance of downtown, people aren't ever going to ride a bus...Lyft... Uber...the girlfriend who picks up their elderly friend and brings them down to Witherspoon Grill. I'm just wondering if you if we've really if we've really thought about that. Will people, at least within a certain distance of downtown, ever really get back into a bus post pandemic? So, I just encourage the thought of more point to

point. I think an integral Lyft-Uber-point-to-point would just be so vibrant for especially our elderly, who aren't getting into cars after the sun sets. But they want to come in and have dinner. That's all. I just have the image of nobody riding the buses, except, you know, outside a certain distance, of course. Okay.

Nat Bottigheimer, NJEDA

other transportation things we're trying to do. Thank you.

I did just want to address the last comment. I really don't think it's a question of distance from town. It's a question of the point that Carlos made earlier: Land Use is key. If there are places along a route that are places to get on and to get off, because there's things to do. The bus loop will be successful. Frequency is something that's also critical. Frequency is sustainable when you have those land uses that support one another by transit. The other thing is, people say that we have a love affair in America with cars but what we have a love affair with is affordable, convenient transportation. We associate ourselves with our cars as things that are status. You know, status that is prioritized by our public realm. And one of the reasons that people are reluctant to take the bus is because there's nothing in the public realm that gives priority to people on the buses. And, furthermore, they don't feel like priorities when they're on the bus. Why would you go from a mode of transportation where you feel like you're a 'king' to a mode of transportation where you feel like a 'peon'. So. let us turn things around! This is the point of many of the designs, permissions, wayfinding and painting of the streets: All these separate elements that, mutually, together,

reinforce the idea that being <u>on transit</u> or <u>on a bike</u> or <u>being on foot</u> has to become the defining priority, a priority that people will associate with themselves. So anyway, that's the last point. Thanks, very important.

Katherine Kish

We've heard some very important words today. One was 'coordination'. Other ones were 'communication' and 'Information'. That describes a major part of what Princeton Future does. The other thing we noted was the word 'practicality'. Another word we heard was 'convenience'. I might add that the big thing that's going to influence all of us over a very short time, is the word 'sustainability'. And that's going to drive us in new ways and it's going to make us rethink our desires for having the most convenient, elegant, singular solution to get somewhere. We will become more willing to 'share'. Tony, you did something very wonderful today. Thank you so much for all the time you're putting in. And another big word for today is 'participatory', so make sure to come again on May 13. These books are available and archived at the Library. They are available. You can talk to Sheldon in the back if you would like one. And we've also sent you digital copies. So, thank you for coming out. Have a wonderful weekend!