

## **Transportation Needs in Palatine**

### **Introduction**

The United Palatine Coalition's Transportation Action Team was formed in response to UP's partner organizations identifying unavailability of transportation as a pervasive and overarching barrier to the success of the organizations' individual work and the larger coalition's goal of *ensuring that children and young adults are inspired and on a path to a purposeful and self-reliant life by age 24*. At its inaugural meeting, the Transportation Action Team assembled some of its social service-providing partners and a number of concerned residents/recipients of services from Partners for Our Communities. This document uses theirs and their clients' experiences as a starting point\* to:

1. Define the transportation "problem" in Palatine, with specific attention paid to what populations are disproportionately impacted by its shortcomings.
2. Establish assumptions about transportation in Palatine and use available research to evaluate them.
3. Outline a research plan to capture unknown, critical information for developing solutions to Palatine's transportation problem.

### **1. Problem Definition**

Palatine's residents primarily transport themselves and their dependents in cars that they own; however, Palatine has geographic concentrations - including its northeast quadrant - of car-less households, meaning those residents are less able to consistently transport themselves to work, school, medical and social services, shopping centers, and social activities. The major alternatives to car-transportation for Palatine's residents are: Pace buses, Metra trains, taxis/rideshare, biking, and walking. For reasons outlined on the following page, the alternatives each have their shortcomings and collectively do not meet the transportation needs of Palatine's residents. Palatine's inadequate transportation is a direct contributor to poverty and impacts Palatine's financial future, as described below:

- Poor transportation perpetuates poverty, because low-income people:
  - Disproportionately face transportation barriers.
  - Are not able to consistently transport themselves to work.
  - Cannot access public institutions, health/social services, commercial centers.
- Allowing poverty to fester is financially irresponsible for Palatine, because:
  - Low-income people spend less money, generating less sales tax revenue.
  - Fewer low-income people buy homes, generating less property tax revenue.
  - Low-income people receive less preventive social and health services, creating a higher demand for emergency services, which costs taxpayers.

The following chart summarizes Palatine's existing transportation options' strengths and shortcomings.

Mode of Transportation	Destination	Cost	Strengths	Shortcomings
PACE bus (The 604 and 696 bus routes)	<a href="#">604</a> : NE Palatine, a few other neighboring suburbs, Woodfield Mall (and NW Transportation Center, to transfer to 696 & other bus routes) <a href="#">696</a> : Harper College, neighboring suburbs	Regular fare: \$2 Reduced fare: \$1 for seniors, disabled, Medicare recipients, military, and students.	- 604 stops near density of apartments, Community Resource Center, shopping centers. - 696 stops near Harper. - Scheduled to run every 20-40 minutes.	- 604 does not provide intra-Palatine service - 696 only provide Palatine residents access to Harper via transfer - According to testimony, service is inconsistent and infrequent. - Residents are unfamiliar with how to use bus transit and unaware of existing offerings.
Metra trains	"Commuter" trains for travel to Chicago and several cities along the way. NW line station is located in downtown Palatine.	Regular fare: \$4-\$7.25 depending on destination. Chicago is \$7.25. Reduced fare: \$2-\$3.50 for seniors, disabled, military, and students. Chicago is \$3.50.	- Consistent service. - Stops in straight line between Palatine and Chicago, providing access to many other commercial centers.	- Predetermined destinations - Expensive
Taxi & Rideshare	To/from anywhere at any time	At time of report, both Lyft and Uber rides currently average \$2/mile once all fees are added. Local taxi companies serving the Palatine area provided quotes that averaged between \$2 and \$3 per mile.	- On-demand service	- Wait times may be "long", >5 minutes - Most expensive option
Biking	To/from anywhere at any time, within reasonable distance, weather permitting.	Free, after initial purchase, and cost of maintenance	- Independent choice of where/when to go	- Poor bike infrastructure in Palatine - Most will not bike in poor weather - Limited carrying capacity - Cannot transport passengers - Unreasonable option for elderly/disabled
Walking	To/from anywhere at any time, within reasonable distance, weather permitting.	Free	- Independent choice of where/when to go	- Poor pedestrian infrastructure in NE Palatine - Most will not walk in poor weather - Limited carrying capacity - Unreasonable option for elderly/disabled

## Desired Outcomes

The Transportation Action Team aims to address Palatine's transportation shortcomings and thereby achieve the following outcomes. To guide the problem-solving process, these desired outcomes have been divided into *short-term*, *long-term*, and *ideal* groupings based off their impact and ease of achievability.

### Short-term

- Provide consistent and affordable public transportation to health and social services in Palatine.
- Provide consistent and affordable public transportation to shopping centers in Palatine.
- Provide consistent and affordable public transportation to large employers of low-wage employees in Palatine.
- Provide consistent and affordable public transportation to Harper College and to schools for extracurriculars in Palatine.

### Long-term

- Alleviate low-income residents of the financial burden for transportation within Palatine
- Ensure residents are able to travel to work outside of Palatine consistently
- Increase education and application for driver's licenses dramatically
- Improve bike infrastructure in Palatine dramatically
- Improve pedestrian infrastructure in Palatine dramatically

### Ideal

- Ease access to bike ownership
- Ensure residents in need of cars have access to them

## **2. Determining Critical Information**

Developing solutions to Palatine's transportation problem requires establishing known information and completing available research as outlined below:

1. Establish the Action Team's assumptions about the problem and potential solutions
2. Compile existing research about Palatine's transportation situation to confirm or reject the Action Team's assumptions
3. Determine what new research needs to be completed to fully understand the problem, refine achievable outcomes, formulate solutions, and develop a plan to systematize the solutions.

### **1. Assumptions**

The following assumptions have been divided into two groups: those which there is adequate research available to confirm or reject in the next section, and those that require more research to adequately evaluate.

#### Evaluable assumptions:

##### *Problem-centered assumptions:*

- The major mode of transportation for Palatine residents is driving.
- Residents in the northeast quadrant of Palatine own less cars than other Palatine residents, and therefore have greater needs for alternative forms of transportation.
- Transportation is a barrier for traveling within and outside of Palatine for: employment, accessing social, educational, and health services, shopping centers, and socializing.
- Bus service is underused because:
  1. Current service does not provide access to important destinations.
  2. The route is impractically long (1-2 hours from end to end).
- Palatine's biking infrastructure is poor

#### Non-evaluable assumptions:

##### *Problem-centered assumptions:*

- Lack of money is a barrier for Palatine residents to transportation
- Residents are unfamiliar with how to use current bus transit offerings.
- Bus service is inconsistent and infrequent.
- Palatine's biking infrastructure is a barrier to people biking for transportation
- Palatine's biking infrastructure endangers people while biking
- Palatine's pedestrian infrastructure endangers people walking in Palatine
- Palatine's pedestrian infrastructure is poor
- Palatine's pedestrian infrastructure is a barrier to people walking for transportation

*Solutions-centered assumptions:*

- Palatine residents' transportation needs cannot be met by Palatine alone, meaning it is necessary to collaborate with county or state governments or for-profit transportation systems.
- Palatine residents' transportation needs cannot be met by addressing only one means of transportation (e.g. bus), but rather through improving access to and the service of multiple modes of transportation.
- Institutions with commercial interests, like Woodfield Mall, the Palatine Chamber of Commerce and Schaumburg Business Association, can be leveraged for support, because improved transportation means more residents will be spending money at the businesses they represent.
- Social service providers have a vested interest in improving transportation because:
  1. More clients would be able to access their services.
  2. Quality transportation infrastructure is attractive to donors making grants and other investments.

## **2. Available Information**

In the following section, available information about Palatine's transportation problem will be used to reject or accept the Transportation Action Team's assumptions.

Assumption: *"The major mode of transportation for Palatine residents is driving."*

Evidence: The most common means of transportation to work for households in Palatine are as follows:

78% Drove Alone  
9.7% Carpooled  
4.89% Work at Home [Data USA]

Evaluation: Accepted. 17.11% of Palatine's working population relies on alternative forms of transportation to driving a car to get them to their workplace. Other forms of transportation are less reliable, making nearly 1/5 of Palatine residents more vulnerable to being late to work or missing work altogether.

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Assumption: *Transportation is a barrier for traveling within and outside of Palatine for employment, accessing social, educational, and health services, shopping centers, and socializing.*

Evidence: Please consider the chart on page 2 for an evaluation of alternative transportation methods to driving in Palatine.

Year	2016
Households	729
Margin of Error	± 366
Share	2%

Considering the chart to the left, while the average Palatine household owns 2 cars, 2% of households (729) own none at all, forcing them to use alternative forms of transportation.

Evaluation: Accepted. Considering nearly 1/3 of Palatine residents transport themselves by means other than driving - 729 households (±366) do not have any car at all - and the extent of shortcomings of alternative transportation options to driving, transportation can certainly be considered a barrier.

Assumption: *Bus service is underused because:*

1. *Current service does not provide access to important destinations.*
2. *The route is impractically long (1-2 hours from end to end).*

Report Area	Total Population Employed Age 16	Population Using Public Transit for Commute to Work	Percent Population Using Public Transit for Commute to Work
Custom Area Estimates*	40,527	1,886	<b>4.65%</b>
Illinois	6,033,483	553,211	9.17%
United States	145,861,221	7,476,312	5.13%

Evidence: Palatine residents' usage of public transportation - which includes buses, trolleys, streetcars,

subways, elevated rails, and/or ferryboats - as their primary means of transportation to work is nearly half that of Illinois residents' on the whole, and buses only make up a part of that 4.65%.

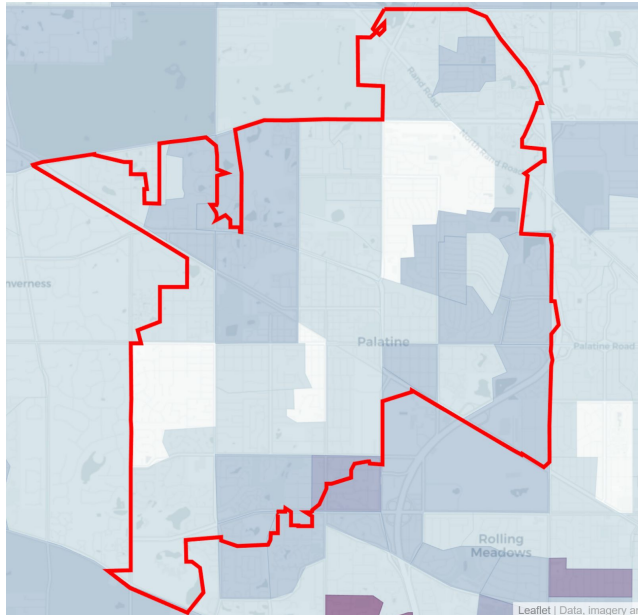
Expanding on the evaluation of Pace bus options in Palatine, summarized in the chart on page 2: The Rand/Dundee stop on this route is near the community resource center, where many healthcare and social service providers have satellite sites, as well as many shopping destinations, but access to these destinations is non-existent to most Palatine residents, because the Pace 604 route only has two stops in Palatine, both of which are concentrated to the northeast quadrant. The 696 route has a stop at Harper College, but no other stops within Palatine.

Travel from northeast Palatine to Harper College is possible by taking the 604 route to the Pace Northwest Transportation center in Schaumburg, and transferring to the 696 route. For comparison, a 13-minute drive from the Baldwin Green apartment complex takes between 1 hour and 1 hour 42 minutes by Pace bus, depending on the time of day. Walking the same distance would only take about half an hour more.

Evaluation: Accepted. While there are important destinations on the bus routes, Palatine residents do not have meaningful access to these destinations, because there are so few stops in Palatine. Getting to Harper College, a critical destination, takes impractically long.

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Assumption: "Residents in the northeast quadrant of Palatine own less cars than elsewhere in Palatine, and therefore have greater needs for alternative forms of transportation to driving."

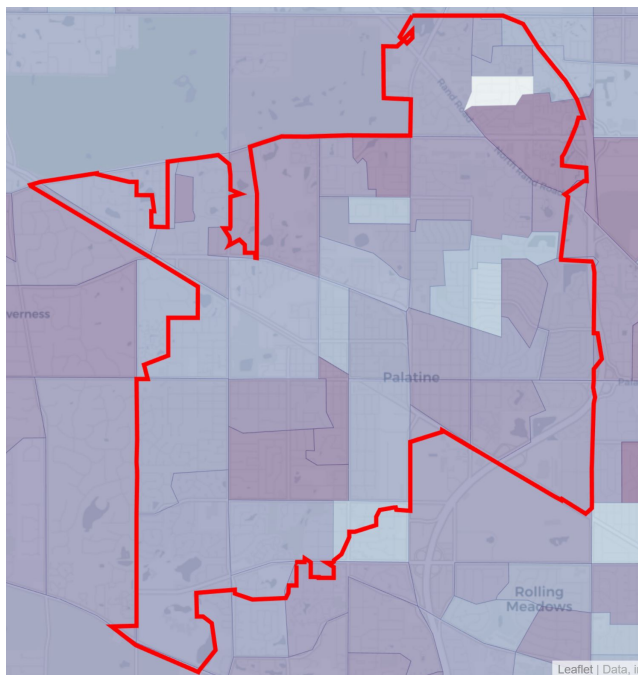


Evidence: This map illustrates "Car ownership in renter households"

White tracts represent an average of 0

Indigo tracts (south edge) represent an average of 3

This map indicates that there are a few outlier tracts throughout Palatine whose home-renters have an average of 0 cars, and several tracts where the average is 1, arguably an inadequate number of cars for 2+ working adults.



This map illustrates residents that "Drove car alone to work"

White tracts represent an average of 50%

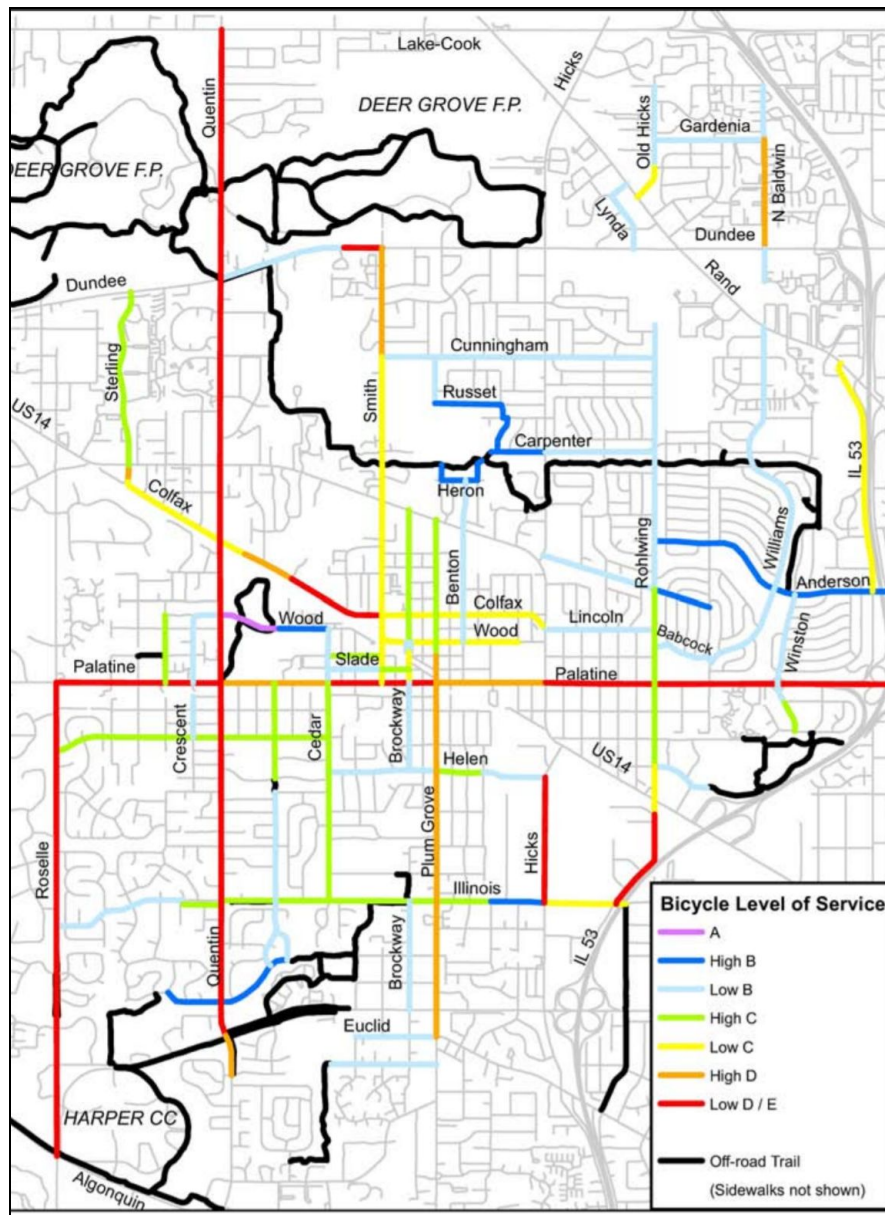
Dark purple tracts represent an average of 90%

This map indicates that there is one outlier tract in the northeast quadrant of Palatine where an average of only 50% of residents "drove car alone to work". It is one of the most densely populated tracts in Palatine.

Evaluation: The assumption is accepted. While there are many areas in Palatine where households do not own an adequate number of cars for household members to transport themselves consistently, the percentage of residents who drive in one tract in the northeast quadrant of Palatine is nearly half that of most other tracts in Palatine.

Assumption: Palatine's biking infrastructure is poor

Evidence: The Village of Palatine evaluated its bike paths in its 2011 Comprehensive Plan using "Bicycle Level of Service (BLOS), a nationally-used measure of on-road bicyclist comfort level as a function of a roadway's geometry and traffic conditions." Using BLOS, an A rating is perfect and an E rating is the worst.



The majority of Palatine's bike paths fall between C-E ratings. There are also many blank spots on the map, without bike routes at all; notably, there are none in the northeast quadrant of Palatine that traverse the major Dundee/Rand intersection, or any that run along either major thoroughway.

Evaluation: Accepted. According to the standard measure for evaluating the quality of bike infrastructure, Palatine does not fair well. As well, considering where data suggests the most significant need for alternative modes of transportation are, there are obvious absences of bike paths in areas that need them.



## **Problem-solving Plan**

Due to the limited information available about transportation in Palatine and its impact on residents, the Action Team has formulated a plan to:

1. Administer a needs assessment, to paint a full picture of Palatine's transportation problem
2. Develop solutions and refine this initiatives' outcomes to measure their success.
3. Systematize solutions, so their impact is sustainable.

### **Needs Assessment**

A needs assessment will be developed with the following goals:

1. Determine the severity of the transportation problem/barriers to transportation within Palatine
2. Identify demographic and geographic concentrations of people dealing with the problem.
3. Determine if a "shuttle" (using partners' existing vehicles to transport people along a predetermined loop in Palatine) would be an effective way to meet its proposed short-term outcomes.

The Team will administer a survey with the aim of capturing data from a population representative of the whole of Palatine, as much as possible. The survey will divide respondents into three profiles, based off "screener" questions early on:

- A. People whose transportation needs are met, and who are satisfied with their transportation options.
- B. People with intermittent transportation needs OR whose transportation needs are met, but would prefer, or are willing to explore, other transportation options.
- C. People whose transportation needs are unmet.

The needs assessment survey will be translated into Spanish. It will be administered by partner organizations both online and in-person. With groups who are expected to have literacy issues, CCSD15's Bilingual Liaisons will assist participants in filling out surveys.

Participants will be asked if they are willing to join a focus group at the end of the survey. Focus groups will be organized according to the profiles the Team is aligning respondents with. Group discussions will enable the Action Team to examine the reasons behind certain behaviors, as well as gather "nice to know" information that is not critical to problem-solving.

## **Solution Development**

After the Action Team has completed its needs assessment, it will reconvene to: evaluate its assumptions of the problem; develop more specific, measurable outcomes to achieve; and develop solutions.

Solution development will involve researching evidence-based solutions to similar problems, based on severity, population, and locale. Potential solutions may include:

- Providing vouchers to residents for rideshare services (e.g. Uber, Lyft, taxi)
- Doing outreach to enroll residents in driver's education
- Doing outreach to increase awareness of existing transportation resources
- Providing cars to community members
- Improving bike infrastructure
- Improving pedestrian infrastructure
- Implementing a bike-sharing program (e.g. Divi, Citibike)
- Implementing a car-share program (e.g. Car2Go, Turo)
- Developing a rideshare co-operative business in low-income community
- Facilitating car-pooling in Palatine

Solving Palatine's transportation problem will almost certainly necessitate seeking grant funding. The needs assessment should give the Action Team adequate data with which to write well-informed grant proposals.

## **Systematizing Solutions**

To ensure the sustainability of the Action Team's solutions in Palatine, they need to be reflected in system change, meaning:

- Palatine's institutions will need to shift their policies and procedures to align with the Action Team's solutions
- A permanent funding stream will need to be identified for the solutions
- Outside institutions may need to be brought in for larger-scale collaborations

In this way, the United Palatine Coalition believes its Action Team can create meaningful progress towards resolving its transportation problem.

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