The City of Des Plaines has partnered with AECOM and The Lakota Group to prepare a feasibility study for a potential new North Central Service Line (NCS) station in the area around Mannheim Road and Oakton Street. While both the Union Pacific Northwest (UP-NW) and NCS lines run through Des Plaines, only the UP-NW has stations at Cumberland and Downtown Des Plaines. The City believes that a new commuter rail station in this area could:

- Serve as a catalyst for transit-oriented development and redevelopment of vacant parcels in the area.
- Add a much needed public transportation option in this area where only 2.5% of workers use public transportation and 75% of workers get to work in single-occupant vehicles.
- Provide multi-modal connectivity to the new Pace PULSE Dempster Line.
- Offer an alternative way to access O'Hare Airport.

The NCS Line that currently runs through Des Plaines was once a part of the Wisconsin Railroad Line and at one point had two stations in Des Plaines. According to the Cook County Chronicle, these stations were closed in 1930 and 1965 respectively, before Metra opened the NCS line. When Metra began operations on the NCS line, it reopened many previous stations, but the Des Plaines stations were not included. The City of Des Plaines has been interested in adding a station on the NCS line for several years, and this study is the first step for Metra to determine if a station at this location is feasible. The study seeks answers to the following questions:

- Can a location be identified that can physically accommodate a station, station parking, and associated amenities?
- Will the station be compatible with current railroad operations?
- Will there be a sufficient number of potential users?
- Will impacts to traffic, storm water, and other factors be manageable?
- Can the station be realistically funded?
- How would a station help to stimulate economic development within the area?

**PROJECT TIMELINE: 2018-2019**

<table>
<thead>
<tr>
<th>Project Milestone</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 2018 - January 2019</td>
<td>Site Selection and Station Spacing Memo, Existing Conditions Memo, Field Reconnaissance</td>
</tr>
<tr>
<td>January 2019 - March 2019</td>
<td>Project Kick-Off Meeting, Community Engagement Plan and Outreach, Community Ridership Survey</td>
</tr>
</tbody>
</table>
The immediate station location in consideration is the north side of Oakton Street, between Mannheim Road and Center Street. This was determined as the best location following an initial site screening analysis, the process for which is outlined in greater detail in Station 3: Station Spacing Overview.

The Oaks shopping center to the west of the potential station includes Butera Market, Goodwill, and the former Cardinal Fitness. The area east of the potential station includes a ComEd utility easement and vacant parcels adjacent to what was once Romano’s Restaurant.

A Des Plaines Fire Station is located on the south side of Oakton, just west of the railroad tracks, which requires careful consideration of public safety concerns. Questions regarding the impact that a station may have on the Fire Station are explored further in Station 2: Community Input & Frequently Asked Questions.

The area surrounding the potential Oakton Street Metra Station includes many single family residential neighborhoods, as well as the Oakton Street business district to the east. The retail areas near the intersection of Oakton Street and Lee Street/Mannheim Road include many big box stores and shopping centers with a number of vacancies. A number of schools and churches also surround the area, including Maine West High School.
OUTREACH METHODS

The public outreach process began in January, after the selection process identified Oakton Street as the preferred location for a station (see Station 3: Station Spacing Overview). A project website—www.DesPlainesOaktonMetraStation.com—was created to house information about the study. A Facebook page was created and targeted to those living within a five mile radius of the proposed station to help spread the word to area residents. An information sheet was disseminated to city council members and interested stakeholders. Flyers were hung around Des Plaines, including area Metra Stations, with information about the open house and the community ridership survey. Through these platforms, a number of key questions have emerged, which are addressed in the following exhibits. Comments received through the website and Facebook page include the following:

“[This would be a win-win for all. The Blue line is convenient but takes an hour to get to The Loop. Metro class airports need to be connected to the city they are in.]”

“I’ve seen no mention of possible effects on already heavily traveled Lee St. It’s a fact that many people already avoid Des Plaines due to heavy traffic, confusion caused by one way streets and complex intersections.”

“How would the fire trucks get around when there infinite number of crossings to get around.”

“A nice idea. Drewback is Oakton traffic which is already horrendous especially at rush hour. Need to restore second traffic lane each direction from tracks to River Rd. Provide more off street parking for those businesses benefiting with the existing single lane configuration.”

“It’s embarrassing that the City has a commuter train line that goes through the city they are in.”

“Where does the NCS line go? How does that compare to the UP-NW line that currently serves Des Plaines?”

FAQ

Where does the NCS line go? How does that compare to the UP-NW line that currently serves Des Plaines?

The table below outlines how a potential Oakton Street Station on the NCS line would compare to nearby Metra stations on the UP-NW line:

<table>
<thead>
<tr>
<th></th>
<th>DES PLAINES</th>
<th>OAKTON STREET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Line</td>
<td>UP-NW</td>
<td>NCS</td>
</tr>
<tr>
<td>Distance to Downtown</td>
<td>37.1 miles</td>
<td>19.2 miles</td>
</tr>
<tr>
<td>Metra Fare Zone</td>
<td>D</td>
<td>D</td>
</tr>
<tr>
<td>Downtown Station</td>
<td>Ogilvie</td>
<td>Ogilvie</td>
</tr>
<tr>
<td>Union</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inbound Trains per Weekday</td>
<td>12</td>
<td>5</td>
</tr>
<tr>
<td>AM Peak</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>PM Peak</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Evening</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Outbound Trains per Weekday</td>
<td>9</td>
<td>19</td>
</tr>
<tr>
<td>AM Peak</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>PM Peak</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>Evening</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Total Trains per Weekday</td>
<td>53</td>
<td>44</td>
</tr>
</tbody>
</table>

Travel Time to/from Downtown:

- Minimum: 24 min
- Maximum: 44 min

2016 Weekday Boardings: 1,142

Fares to Downtown Chicago:

- Monthly: $181.25
- 30-Ride: $59.50
An NCS station on the north side of Oakton Street may have some impact on the amount of time that gates are down at the Oakton Street/NCS-CN grade crossing, which could affect local traffic conditions and emergency vehicle response time reaching locations east of the tracks. However, it is believed that the additional gate downtown will be comparatively short.

While the technical analysis of these impacts is not complete, we believe the following factors are likely:

- **INBOUND TRAINS STOPPING AT THE OAKTON STATION (9 PER DAY)** will cause gates to come down as they approach the station. Given that the train will load north of the crossing, gates will come up after the train stops to board/alight passengers. After the train leaves the station, gates would again come down as the train passes through the crossing. The typical time for a train to traverse the crossing, and reactivate the gates at the up position is an estimated 45 seconds. The additional downtime associated with stopping at the station is an estimated 25 seconds. Over the nine inbound trains for the day, this accumulates 3.75 minutes of additional gate downtime per day.

- **OUTBOUND TRAINS STOPPING AT THE OAKTON STATION (10 PER DAY)** would also impact gate downtimes, since trains will travel slower through the crossing before stopping at the Oakton Street Station. The impact is estimated as a 25-second increase from current conditions - a total of 4.17 minutes per day that gates would be down.

Given the approximate 15 hours of NCS service per weekday, the combined IN and OUT added gate downtime is 7.92 minutes, representing 0.9% added time per day gates would be down.

**FAQ**

**What would the impact be on traffic nearby?**

Would this impact the Des Plaines Fire Station service?

There are as many as ten freight trains on this segment of the line daily. These longer, slower trains add an estimated 2.4 minutes of gate downtime per train, resulting in as much as 24 minutes of gate downtime per day. It is important to note that freight trains, which require significantly more time to clear a crossing compared to commuter trains, also use the line. It is believed that there are as many as ten freight trains on this segment of the line daily. These longer, slower trains add an estimated 2.4 minutes of gate downtime per train, resulting in as much as 24 minutes of gate downtime per day.

**Will there be enough parking to accommodate Metra Station riders?**

Different variations of station layouts are being considered by the planning team to maximize parking availability and shared parking opportunities. Parking at this location is considered key to the success of this station, and could be what sets it apart from nearby stations.

**SUFFICIENT PARKING CAPACITY WOULD BE KEY TO THE SUCCESS OF THIS STATION**

Parking Demand can be creatively accommodated within the station area.

The table above outlines the parking capacity and % of parking used at each station. It is clear that parking at nearby Des Plaines and Dee Road UP-NW stations is close to capacity. Creating parking incentives for Metra riders to utilize the Oakton Street Station will utilize a potential Oakton Street Station with additional parking capacity.
COMMUNITY RIDERSHIP SURVEY

A survey has been designed to help our team better understand the potential riders of a new Metra station at this location.

Key questions include:

- **How do you currently travel to work or school?**
- **How likely would you be to use a station at this location?**
- **For what purpose would you use a station at this location?**
- **How would you access a station at this location?**

**TAKE THE SURVEY!**

A hard copy of the survey is available for open house attendees. Alternatively, the online survey can be completed at: surveymonkey.com/r/oaktonmetrastation
Help us understand how you fit into the bigger picture!

- Use the blue stickers to mark where you live
- Use the green stickers to mark where you work or attend school
LIVE WORK EXERCISE

Help us understand how you fit into the bigger picture!

Mark here if you live or work in the
NORTHWEST SUBURBS

Mark here if you live or work in the
LAKE COUNTY

Mark here if you live or work in the
NORTH SHORE SUBURBS

Mark here if you live or work in the
SOUTH & WEST SUBURBS

Mark here if you live or work near
O’HARE & ROSEMONT

Mark here if you live or work in the
CITY OF CHICAGO

Use the blue stickers to mark where you live
Use the green stickers to mark where you work or attend school
To narrow the field of prospective Metra Station sites, an initial examination of alternative station locations was performed. Eight locations were initially identified, as shown in the table below and the map to the right.

**STATION SCREENING**

<table>
<thead>
<tr>
<th>#</th>
<th>LOCATION</th>
<th>DISTANCE TO UNION STATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Prospect Heights Station</td>
<td>24.0</td>
</tr>
<tr>
<td>1</td>
<td>Central Road</td>
<td>22.1</td>
</tr>
<tr>
<td>2</td>
<td>Rand Road / Golf Road / Seegers Road</td>
<td>21.3</td>
</tr>
<tr>
<td>3</td>
<td>Northwest Highway</td>
<td>20.8</td>
</tr>
<tr>
<td>4</td>
<td>Thacker Street</td>
<td>20.2</td>
</tr>
<tr>
<td>5</td>
<td>Algonquin Road</td>
<td>19.7</td>
</tr>
<tr>
<td>6</td>
<td>Forest Avenue</td>
<td>19.4</td>
</tr>
<tr>
<td>7</td>
<td>Oakton Street</td>
<td>19.2</td>
</tr>
<tr>
<td>8</td>
<td>Howard Avenue</td>
<td>18.6</td>
</tr>
<tr>
<td></td>
<td>O’Hare Transfer Station</td>
<td>17.1</td>
</tr>
</tbody>
</table>

**OAKTON STREET**

The Oakton Street site offers several key advantages over the other highly ranked sites, Algonquin and Forest, including good roadway access from the east and west, greater distance from existing UP-NW stations, and access to the Pace Pulse Dempster Line station. Additionally, the Mannheim/Lee intersection is 1,000 feet to the west, so the potential back-up from park-n-ride lots emptying would be less likely compared to the Algonquin and Forest sites. The vacant land to the east could be used for parking or a joint development project, and it is possible that commercial properties to the west may be ripe for redevelopment. For these reasons, a site on the north side of Oakton Street was chosen to advance for more detailed study.

**RELEVANT METRICS**

Important considerations in selecting a site include the opportunity to use development to maximize the number of potential users who would be within walking distance of the station, as well as other rail characteristics, such as the presence of double tracks or at-grade crossings. The table to the lower right outlines the suitability of each of the sites, including the following metrics:

- **WALK SCORE** | Walk Score is a commonly accepted metric for the pedestrian friendliness of a given location, with points awarded based on the walking distance to common amenities, as well as the pedestrian friendliness of infrastructure characteristics such as block length and intersection density. On a scale from 0 to 100, locations 50 or above are considered walkable.
- **MULTI-FAMILY UNITS** | Multi-family residential developments are more likely to achieve the densities that support transit ridership and minimize the need for auto-access infrastructure, parking, and also lessen traffic impacts at the station.
- **HOUSEHOLDS** | Using 2010 census data at the block level, the number of households within a half mile were estimated to further understand potential non-motorized access riders within the station area.
- **(RE) DEVELOPMENT AREA** | The estimation of potential redevelopment acreage was carried out by identifying large contiguous parcels of low-intensity land usage that could be acquired and redeveloped at a relatively low cost and with minimal impact to station area households.
- **PACE BUS ROUTES** | The presence of existing Pace Bus routes highlights a station area's potential to grow its ridership outside of the half-mile walkshed without relying on riders accessing the area by private automobile, as well as a larger potential market for commercial enterprises established as part of the TOD.

**Station Suitability Analysis**

<table>
<thead>
<tr>
<th>Walk Score 50+</th>
<th>Multi-Family Units in 1/2 Mile</th>
<th>Households in a 1/2 Mile</th>
<th>(Re)Development acres</th>
<th>Pace Bus Routes</th>
</tr>
</thead>
<tbody>
<tr>
<td>29</td>
<td>0</td>
<td>2,600</td>
<td>2.8</td>
<td>None</td>
</tr>
<tr>
<td>43</td>
<td>350</td>
<td>1,800</td>
<td>10.0</td>
<td>Route 250</td>
</tr>
<tr>
<td>42</td>
<td>640</td>
<td>4,600</td>
<td>0.0</td>
<td>Route 208</td>
</tr>
<tr>
<td>66</td>
<td>600</td>
<td>6,700</td>
<td>3.1</td>
<td>Route 226, 230, 250</td>
</tr>
<tr>
<td>75</td>
<td>290</td>
<td>4,900</td>
<td>2.4</td>
<td>Routes 226, 230, 250</td>
</tr>
<tr>
<td>73</td>
<td>9</td>
<td>4,200</td>
<td>1.3</td>
<td>Routes 226, 230, 250</td>
</tr>
<tr>
<td>73</td>
<td>10</td>
<td>4,800</td>
<td>3.0</td>
<td>Routes 226, 230, 250</td>
</tr>
<tr>
<td>52</td>
<td>140</td>
<td>5,000</td>
<td>8.8</td>
<td>Route 250</td>
</tr>
</tbody>
</table>

**Green = 1**  **Yellow = 0**  **Red = -1**
The proposal is to add a new infill station between two existing stations on the NCS line—Prospect Heights and the O'Hare Transfer station. The site screening analysis identified Oakton as the preferred location for a station. Placing a station at this location would fill the 6.9 mile gap resulting in spacing of 4.8 miles to the Prospect Heights station and 2.1 miles to the O'Hare Transfer station.  

Transportation systems must choose between:

**Wider Spacing**

- Minimal Stops
- Faster Service

**Closer Spacing**

- More Stops
- Greater Access

More stops also allow for stations that are easier to walk to. This walkability goes hand-in-hand with developing the station area to maximize the use of transit.

If the station is to serve local destinations, opportunities to connect station area workers to their employers through a shuttle type program could be explored. The current Lake Cook Road Shuttle Bug program is a strong example of such a system.

The five largest commuter rail agencies are older, legacy systems. These commuter rail systems contain comparatively close spacing of stations, many with averages falling below three miles. New infill stations that have been added to the Metra network have filled gaps ranging from 2.1 to 9.8 miles, and the distance between stations filled has not had an obvious effect on performance.

**Comparisons Across Metra System**

Metra's average spacing is two miles, including 83 stations within one mile of the next inbound station. Our research has found that there is not a strong correlation between station spacing and station ridership—too many other factors are at play influencing station performance.
A key part of the analysis to estimate demand for the proposed Des Plaines NCS station is to define the area that residents would be drawn from, representing a catchment area for originating riders of the station. The Des Plaines NCS station origin market shed (highlighted in red in the map to the left) was based on the unique area that is nearest to the Des Plaines NCS station site in relation to other Metra stations.

Rider Origin

Based on 2016 data from Metra, 148 originating riders (“origins”) are currently located within the proposed Des Plaines NCS station market shed. Most currently use a UP-NW station: 66 percent board at the Des Plaines Station and 16 percent board at the Cumberland Station. A heat map of the origins for the potential Des Plaines NCS station and nearby stations is depicted to the left, indicating that many of the existing riders within the Des Plaines NCS market shed are in the immediate proximity of the potential site at Oakton Street.

Based on analysis of 2015 Census LEHD origin-destination data, there are just over 900 Chicago central business district (CBD) workers living within the potential Des Plaines NCS origin market shed—an important metric since the downtown work commute is Metra’s primary market. The distribution and density of these workers is shown in the map to the left.

When evaluating the commuter flows between the origin market shed and the primary destination for area commuters (i.e., downtown Chicago), it is also useful to consider the reported travel mode. According to the census data of CBD commuters living in the Des Plaines NCS origin shed, 40% commute by Metra, 45% by driving or carpooling, and 11% by CTA rail.

As the census survey instrument does not allow for multi-modal trips, it is not possible to identify when, for example, a bus is used to access a commuter rail station, or CTA rail is used to complete a line-haul bus trip.

Rider Destination

The map to the left illustrates the density of work locations of people living within the Oakton station origin shed to understand work trips outside of the typical downtown commute. Among the 10,125 workers living in the Oakton shed and working within the Chicago metropolitan area, the greatest densities are in downtown Chicago, Des Plaines, and Elk Grove Village.
TRANSIT CONNECTIVITY

Within a short distance of the proposed station location are four Pace bus routes: 221 Wolf Road, 226 Oakton Street, 230 South Des Plaines, 250 Dempster Street. At a farther distance are the CTA Blue Line and Bus Route 68 Northwest Highway. The map to the right shows the routing of these alternative transit services. Current Metra service is provided at nearby UP-NW and NCS stations.

The boarding history across nearby transit service is provided in the figure below. Most bus and rail ridership has held steady over time, but ridership at the Rosemont Blue Line station has risen dramatically since 2009, after a declining trend from 2000 until that point. It is likely that the growth in ridership is due in part to the large-scale commercial development that has taken place in the area in recent years, such as the Fashion Outlets, which opened in 2013, as well as various entertainment venues.

Weekday Boarding History (Nearby Transit)

ACCESS TO JOBS

In order to better understand how the existing transit network serves persons living near the potential Oakton Street station, data for Metra, CTA, and Pace were gathered and a network analysis was performed to determine how many employment destinations could be reached using only currently operating walk-access transit service, including the wait times needed to transfer between routes. As indicated by periodic spikes in job accessibility during the AM peak, the opportunity to take advantage of Metra service at nearby stations on the NCS and UP-NW dramatically increases the number of jobs accessible.

Currently, for non-vehicular access commuters, Metra stations can only be reached from the Oakton site by taking connecting bus service, which, due to timing, distance, and road congestion-related constraints, limits access to jobs in central Chicago via transit rail. The changing landscape of transit accessibility over the course of an hour (in 10-minute departure time intervals) is illustrated spatially in the maps below.

Current 60-Minute Transit Service Areas from Oakton Site by Peak Departure Times

2015 Jobs Accessible via Current Transit from Oakton Site

Weekly Boarding History (Nearby Transit)

SOURCE: Pace and CTA data: RTAMS, average September weekday riders, 2000-2017. Metra boardings history from Metra data. CTA Blue Line Rosemont Station

2015 Jobs Accessible via Current Transit from Oakton Site

SOURCE: Metra, CTA: Pace OSTS data (November 2018)
What do you see as the main benefits of a station at this location?

Using the stickers provided, mark which of the following benefits of a new station you see as the most relevant or important. If there are benefits not listed, please use the marker provided to write in those benefits.

**PROVIDE ALTERNATIVE TO UP-NW SERVICE**

- Access to Downtown Chicago, O'Hare Airport, and other NCS destinations.
- Constrained parking at nearby stations and access to Union Station vs. Ogilvie.

**POTENTIAL INCREASE IN NEARBY PROPERTY VALUES**

- A Metra station within walking distance can increase nearby home & property values.
- Potential redevelopment of underutilized properties and improvements along Oakton Street.

**OFFSET CURRENT RAIL IMPACTS WITH STATION BENEFITS**

- NCS trains already traverse the City, causing traffic delays, noise, accident risks, etc., with no benefit to residents due to the lack of a Des Plaines Station.
- Future Dempster line express bus service between Downtown Evanston and O'Hare Airport will stop at Mannheim and Oakton.

**OTHER**

Share any additional benefits with the marker provided!
**What are your main concerns associated with a station at this location?**

Using the stickers provided, mark which of the following concerns of a new station you see as the most relevant or important. If there are concerns not listed, please use the marker provided to write in those concerns.

<table>
<thead>
<tr>
<th>NCS SERVICE FREQUENCIES</th>
<th>NEIGHBORHOOD IMPACTS</th>
<th>LIMITED CONNECTIVITY</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of daily trains on NCS line are lower than UP-NW, making use less attractive.</td>
<td>Potential for diminished local quality of life due to noise, pollution, safety concerns, etc.</td>
<td>Pedestrian crossings will only be available at Oakton Street, making connections to the neighborhood and nearby businesses less convenient.</td>
<td>Share any additional concerns with the marker provided!</td>
</tr>
</tbody>
</table>

- **INCREASED TRAFFIC CONGESTION FROM METRA RIDERS**: Park-n-ride and drop off riders might add to congestion near Oakton and Lee/Mannheim.
- **LONGER GATE DOWNTIMES WILL IMPACT TRAFFIC AND FIRE SERVICE**: Crossing gates could stay down longer, particularly for inbound trains, exacerbating current issues.
- **PUBLIC COST TO CONSTRUCT**: Implementing a new station will largely require local funding.
ADDITIONAL ANALYSIS

A number of additional technical documents need to be finalized before the feasibility study is complete. These include:

Market Assessment
This technical memo will identify the potential for development/redevelopment in the station area, based on field investigations and data collected. An assessment of the economics for redevelopment in the half-mile area will be completed to determine the suitability of the area for transit-oriented development (TOD). The preparation of a recommended land use plan for the station area will be informed by stakeholders and local planning officials.

Travel Demand
In preparation for the demand analysis, the NCS timetable will be revised to include the proposed station. Characteristics of the proposed Des Plaines Oakton station will be applied to two different models (Simplified Trips-On-Project Software (STOPS) model and a regression model) to derive boardings.

Financial and Operational Impacts
Land requirements for the station, including commuter parking, will be identified and a draft conceptual-level plan showing station building, platforms, parking / transportation improvements, and pedestrian access will be prepared. Based on the general parameters of the proposed station, impacts to traffic, stormwater, railroad operations, as well as capital costs, operations and maintenance costs, and revenues will be determined.

Community Input Summary
All feedback received throughout the feasibility study will be summarized into a brief memo. Community input will be represented by one-on-one interviews with local stakeholders, community ridership survey results, input from this public open house, and messages received through the study website and Facebook page.

ADDITIONAL MEETINGS

Once all elements of the feasibility study are complete, the following additional meetings will take place:

Public Presentation of Findings
A public presentation will take place once all analysis is complete, which will outline the key findings from the feasibility study. This may take the form of a Council Meeting, or an Open House. Opportunities for comment will be provided prior to the final presentation to Metra.

Metra Presentation
The final step of the feasibility study will be to present all findings from the feasibility study to decision makers from Metra. From there, the study will go through an internal review and decision making process to determine if a Metra Station can be added at the Oakton/Mannheim location.

CHECK THE STUDY WEBSITE FOR UPDATES

www.DesPlainesOaktonMetraStation.com

STAY ENGAGED THROUGH THE STUDY FACEBOOK PAGE

www.facebook.com/OaktonMetraStation