CITY OF PEORIA

Greater Peoria Area
PASSENGER RAIL SERVICE

PEORIA-CHICAGO PASSENGER RAIL

Feasibility Study

JULY 2022

Illinois Department of Transportation

Greater Peoria Area
PASSENGER RAIL SERVICE

TABLE OF CONTENTS

Executive Summary

The City of Peoria currently ranks 8th in the list of largest cities in Illinois. Of the top 15 largest cities in Illinois by population, Peoria is the only one without current or planned access to passenger rail service (Rockford is in the design/construction phase). Further, the Peoria Metropolitan Area has a population of just over 400,000 and is the largest metro area in the state without passenger rail service. With that in mind, the Tri-County Metro area and supporting communities, associations, and others (see Steering Committee) approached the Illinois Department of Transportation (IDOT) and requested they conduct a feasibility study of the 1937-1978 former Rock Island Peoria Rocket passenger route (page 7), with the condition that the route be operated by Amtrak and go to Chicago Union Station (CUS) to connect with Amtrak's rail network. This corridor would bring passenger rail service to other communities including Peru-LaSalle, Ottawa, and Morris, that currently do not have rail service as a transportation option. Currently the railroads involved are the Tazewell & Peoria Railroad, the Iowa Interstate Railroad, CSX Transportation, Metra, and Amtrak (CUS). Depending on the route option in Joliet, it may also involve the CN. Patrick Engineering, Inc. was tasked to do a non-invasive study collecting enough data to determine infrastructure, station & equipment costs including approximate station locations and ridership potential. A community survey was conducted and showed strong public interest in this service. This Study determined a cost estimate of $2.54B to provide service for 5 round trips daily to serve Peoria, Peru/LaSalle, Ottawa, Morris, Joliet and CUS, with a flag stop at Utica for Starved Rock State Park. The ridership potential of a range from 440 to 820 daily riders was determined using three different methods, which results in 600 riders on the average daily.

Additionally, a new connection somewhere in the Joliet to CUS segment will be needed to route to CUS. Future steps in this process are preliminary design and NEPA clearance to advance in the Federal Railroad Administration's new Corridor Identification and Development (ID) Program.

Steering Committee

A Passenger Rail Committee was established in August 2021 by City of Peoria Mayor Rita Ali. This group has monitored the actions of the Peoria Rail Passenger Feasibility Study and increased the membership upon identification of a preferred route. The committee determined that sufficient data has been collected and requested IDOT to produce a final feasibility report for Mid-2022. The committee includes the following representatives:

- City of Peoria Mayor Rita Ali – Co-Chair
- Former U.S. Secretary of Transportation Ray LaHood – Co-Chair
- 17th District US Representative Cheri Bustos
- 18th District US Representative Darin LaHood
- 46th District Illinois State Senator Dave Koehler
- 92nd District Illinois State Representative Jehan Gordon-Booth
- 73rd District Illinois State Representative Ryan Spain
- City of Peoria Councilman At-Large Sid Ruckriegel
- North Central Illinois Council of Governments Executive Director Kevin Lindeman
- Tri-County Regional Planning Commission Executive Director Eric Miller
- IDOT Secretary of Transportation Omer Osman
- City of LaSalle Mayor Jeff Grove
- City of Morris Mayor Chris Brown
- Village of North Utica President David Stewart
- City of Ottawa Mayor Dan Aussem
- City of Peru Mayor Ken Kolowski
- LaSalle County Chairman Don Jensen
- Peoria County Board Chairman Andrew Rand
- Bradley University Executive Director Brad McMillan
- West Central Illinois Building and Construction Trades Council Representative Matt Bartolo
- Greater Peoria Economic Development Council CEO Chris Setti
- Discover Peoria CEO J.D. Dalfonso
- Illinois Valley Chamber of Commerce CEO Bill Zens
- Peoria Area Chamber of Commerce CEO Joshua Gunn
- Peoria County Administrator Scott Sorrel
- City of Peoria City Manager Patrick Urich
- City of Ottawa Economic Development Director David Noble
- City of Ottawa Tami Koppen

Background

Peoria's rail passenger service ended in 1978 with the Rock Island Railroad shutting down service of the Peoria Rocket route due to the Railroad's poor track conditions, lack of ridership and no subsidy funds. The Rock Island had been through numerous bankruptcies and ceased operations in 1980. CSX Transportation (CSX) acquired the line from Bureau to Henry to continue service to the Goodrich chemical plant just north of Henry. The remainder of the line from Henry to Peoria was out of service and washed out in many locations. It was eventually purchased by the Lincoln & Southern Railroad (L&S), owned by BF Goodrich to restore service into Peoria. A complete track rehabilitation was accomplished with IDOT's help. In 1987, the L&S granted Iowa Interstate (IAIS) operating rights over everything between Henry and Peoria. In the mid 2000's IAIS obtained rights to service the line from Bureau to Henry. The IAIS purchased the line from L&S in 2006.

Briefly, from August 10, 1980, to October 4, 1981, Amtrak and the State of Illinois ran a passenger train from Chicago to East Peoria, named the Prairie Marksman. This service ran on the Chicago to St. Louis corridor to Chenoa, then along the TP&W from Chenoa to terminate in East Peoria. Due to poor ridership, this service was terminated.

Today the City of Peoria currently has four options to get from downtown Peoria to downtown Chicago; Drive by car (3-4 hours & parking), Bus via Bloomington (6 hours), Bus plus Amtrak (5.5 hours via Galesburg or 8 hours via Springfield) or Plane plus Transit (2-3 hours). Adding direct passenger rail service has been studied at various times since then, (see previous studies Appendix A) but has always determined that the route connect through Bloomington. The following is data/excerpts from those studies.

2003 – A Feasibility Study was compiled for the City of Ottawa to examine commuter rail service from LaSalle/Peru to Joliet Union Station. Ridership from the Peoria area was not included in the study; however it predicted a growth rate of 37%, actual growth rate (2020 census) was 32% for this 3 county area.

2011 – An Amtrak Feasibility Study was compiled to determine the potential for establishing passenger rail service from Peoria to Normal to Chicago. Only a rail shuttle from East Peoria to Normal was studied in more detail.

2012 – A Midwest HSR Association study was compiled to examine the Spoke & Hub around Chicago. Feeder bus service was assumed for Peoria to Normal.

2013 – The Tri-County Regional Planning Commission funded a study to determine the potential for commuter service between Peoria and Bloomington/Normal. This study analyzed bus service and commuter rail service originating at Peoria's airport.

2017 – Illinois Department of Transportation Rail Plan expressed "Currently, there are no plans to reestablish rail service in the Peoria area".

2021 – Midwest Regional Rail Plan referred to the fact of establishing an east-west route from Davenport, IA on through Galesburg, Peoria, Bloomington (Hub) and ending in Champaign.

The Steering Committee has elected to investigate the former Rock Island Rocket route with the exception of service into Chicago Union Station (CUS) and not LaSalle St. Station as the former service provided.

Design Parameters

This study is predicated on the fact that the proposed intercity rail passenger trains will travel at a speed of 79 mph unless geometric conditions (curves, interlockers, turnouts, bridges, etc.) prohibit this operation. In some locations, 90 mph may be analyzed. Existing track will require rehabilitation to a safe and maintainable level. Passing sidings will be designed to accommodate freight train meets. At this study level we anticipate Amtrak as the operator.

All public grade crossings will be upgraded to flashing lights and gates and constant warning time technology. Grade crossing approaches will be evaluated for compliance to Illinois Commerce Commission (ICC) standards. Private crossings will be addressed as well for signage and safety needs. Centralized Traffic Control (CTC) and Positive Train Control (PTC) will govern train operations on this route. Dispatching will be handled by the owning railroads (Tazewell & Peoria, Iowa Interstate Railroad, CSX, Metra and CUS).

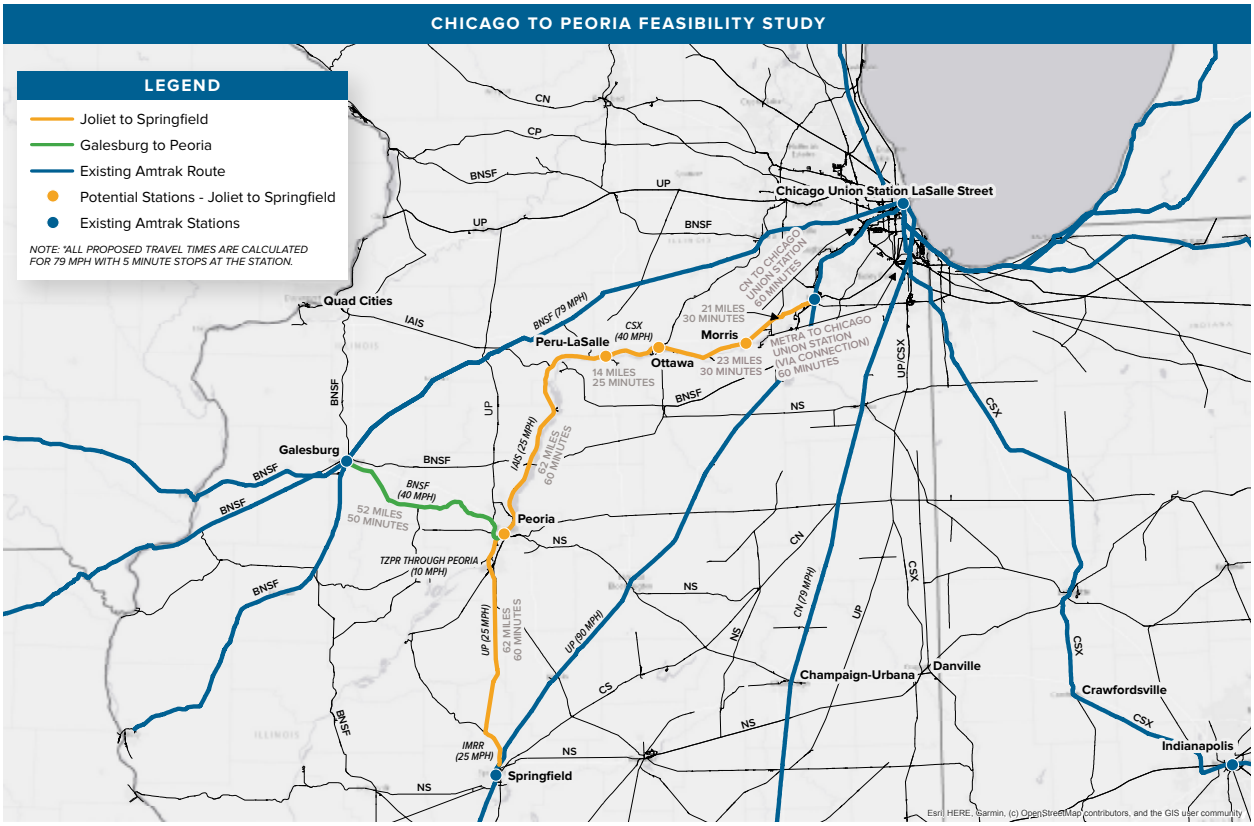
Furthermore, the study assumed that there will be 5 roundtrip frequencies from downtown Peoria to Chicago with station stops at Peoria, Peru/LaSalle, a flag stop at Utica for Starved Rock State Park, Ottawa, Morris, Joliet and Chicago Union Station (CUS). New stations will be constructed using Amtrak station guidelines. A new layover facility in the Peoria area will be needed for the crew and storing/servicing the equipment. Further, a new connection is required to run service into CUS.

Proposed Rail Passenger Route

HISTORY

The majority of the proposed route utilizes the former Chicago, Rock Island and Pacific (CRIP) Railroad from downtown Peoria to Joliet or Chicago. This was the route of the well-known “Rock Island Rockets” that were introduced in 1937 and operated by the CRIP. By the time that Amtrak was formed in 1971, the Rock Island (that did not join Amtrak) was down to two Rockets, the Peoria Rocket and the Quad Cities Rocket. That service was discontinued in the mid-1970’s. In 1980, the Regional Transportation District (RTA) purchased the line from Joliet to LaSalle St. Station. The portion of the Rock Island from Joliet to Peoria was owned by a holding company and today is leased by CSX Transportation from Joliet to Bureau Jct on the former Rock Island mainline and from Bureau Jct to Henry, IL on the Peoria branch. From Henry to just 4 miles north of downtown Peoria at a location called Waterworks it is Iowa Interstate. From that point to downtown Peoria it is the Tazewell and Peoria Railroad (TZPR), which is a Genesee & Wyoming (G&W) Inc. subsidiary.

ROUTE CHARACTERISTICS



The route today between Peoria and Joliet is a single track, non-signaled route that varies in condition between Class III (60 mph Passenger/40 mph Freight) to Class I (15 mph Passenger/10 mph Freight). From Joliet north, while the final route into Chicago Union Station has not been determined in this study, both options (Metra from Joliet to 39th St, then an existing connection to the Chicago Rail Link (CRL) and a new connection from the CRL to Norfolk Southern (NS) and continuing north onto Amtrak at 21st St to CUS) or (a connection in Joliet from Metra to the CN to CUS). Each of these routes other than the connections to be built are current Amtrak and/or Metra routes. See exhibits X and Y

The route from Peoria to Joliet includes 40 bridges with a total of 82 spans plus a moveable lift bridge over the Des Plaines river in Joliet. There are 110 public at-grade crossings and 104 private at-grade crossings.

EXHIBIT X – Joliet Connection

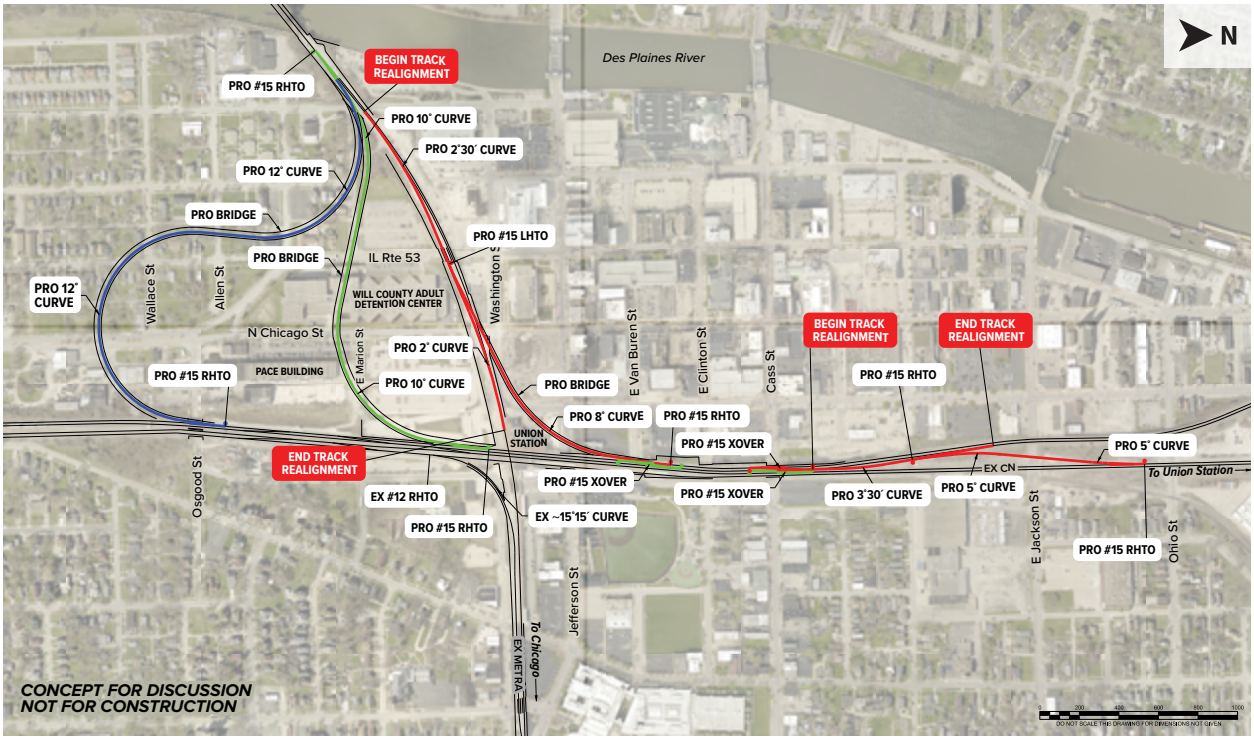


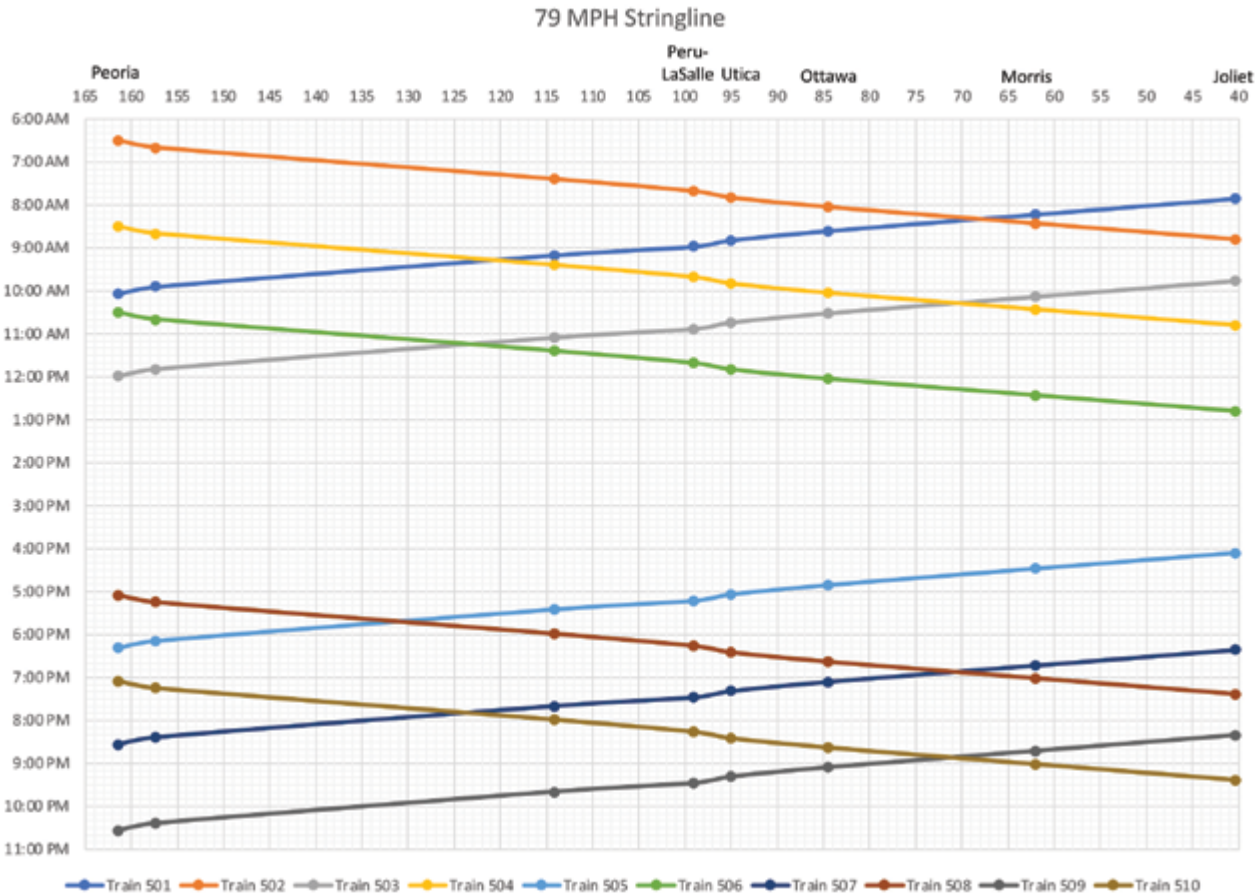
EXHIBIT Y – 39th Street Connection

Community Outreach

A public interest survey was available from January 25 – February 28, 2022. The survey was publicized through various media outlets and social platforms. Ten questions were asked to gauge the public's interest in passenger rail service. A strong interest generated over 31,000 responses. The participants overwhelming expressed support for this service. The full report on the results of the survey is included in ***Appendix B***.

Operating plan

Patrick compiled an operating plan using the stringline method to determine passenger train run times and meet locations. This also helps to identify the passing siding locations and any conflicts there might be with the current Amtrak/Metra schedules. Departures begin at Peoria at 6:30am, 8:30am, 10:30am, 5:05pm and 7:05pm. Currently the study has not compiled departure times from CUS because a connection location is not assigned. Current departure times from Joliet are 7:51am, 9:46am, 4:13pm, 6:13pm and 8:13pm. The stringlines presented do not account for current or future freight train traffic within the corridor.



POTENTIAL ROUTE SCHEDULES

DRAFT Northbound

	Train 502		Train 504		Train 506		Train 508		Train 510	
STATION	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP
Peoria*		6:40 AM		8:40 AM		10:40 AM		5:05 PM		7:05 PM
Waterworks		6:50 AM		8:50 AM		10:50 AM		5:15 PM		7:15 PM
Bureau Jct		7:23 AM		9:23 AM		11:23 AM		5:48 PM		7:48 PM
Peru-LaSalle*	7:34 AM	7:39 AM	9:34 AM	9:39 AM	11:34 AM	11:39 AM	5:59 PM	6:04 PM	7:59 PM	8:04 PM
Utica*	7:42 AM	7:47 AM	9:42 AM	9:47 AM	11:42 AM	11:47 AM	6:07 PM	6:12 PM	8:07 PM	8:12 PM
Ottawa*	7:54 AM	7:59 AM	9:54 AM	9:59 AM	11:54 AM	11:59 AM	6:19 PM	6:24 PM	8:19 PM	8:24 PM
Morris*	8:14 AM	8:19 AM	10:14 AM	10:19 AM	12:14 PM	12:19 PM	6:39 PM	6:44 PM	8:39 PM	8:44 PM
Joliet*	8:34 AM	8:39 AM	10:34 AM	10:39 AM	12:34 PM	12:39 PM	6:59 PM	7:04 PM	8:59 PM	9:04 PM
Blue Island		8:56 AM		10:56 AM		12:56 PM		7:21 PM		9:21 PM
CP 39th St		9:05 AM		11:05 AM		1:05 PM		7:30 PM		9:30 PM
CWI Connection		9:07 AM		11:07 AM		1:07 PM		7:32 PM		9:32 PM
Chicago*	9:17 AM		11:17 AM		1:17 PM		7:42 PM		9:42 PM	

DRAFT Southbound

	Train 501		Train 503		Train 505		Train 507		Train 509	
STATION	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP	ARR	DEP
Chicago*		7:05 AM		9:05 AM		3:30 PM		5:30 PM		7:30 PM
CWI Connection		7:15 AM		9:15 AM		3:40 PM		5:40 PM		7:40 PM
CP 39th St		7:17 AM		9:17 AM		3:42 PM		5:42 PM		7:42 PM
Blue Island		7:26 AM		9:26 AM		3:51 PM		5:51 PM		7:51 PM
Joliet*	7:43 AM	7:48 AM	9:43 AM	9:48 AM	4:08 PM	4:13 PM	6:08 PM	6:13 PM	8:08 PM	8:13 PM
Morris*	8:03 AM	8:08 AM	10:03 AM	10:08 AM	4:28 PM	4:33 PM	6:28 PM	6:33 PM	8:28 PM	8:33 PM
Ottawa*	8:23 AM	8:28 AM	10:23 AM	10:28 AM	4:48 PM	4:53 PM	6:48 PM	6:53 PM	8:48 PM	8:53 PM
Utica*	8:35 AM	8:40 AM	10:35 AM	10:40 AM	5:00 PM	5:05 PM	7:00 PM	7:05 PM	9:00 PM	9:05 PM
Peru-LaSalle*	8:43 AM	8:48 AM	10:43 AM	10:48 AM	5:08 PM	5:13 PM	7:08 PM	7:13 PM	9:08 PM	9:13 PM
Bureau Jct		8:59 AM		10:59 AM		5:24 PM		7:24 PM		9:24 PM
Waterworks		9:32 AM		11:32 AM		5:57 PM		7:57 PM		9:57 PM
Peoria*	9:42 AM		11:42 AM		6:07 PM		8:07 PM		10:07 PM	

**Indicates Potential Station Location*

Ridership

Preliminary ridership forecasts were developed for the corridor area using the Simplified Trips-on-Project Software (STOPS). Because the STOPS model was used and is designed more for commuter type service using census and employment data, additional methodologies were used to confirm the validity of the numbers.

APPROACH 1: STOPS Synthetic Mode – Utilized census data, existing Amtrak routes and the Illinois Statewide Travel Demand Model

APPROACH 2: STOPS Incremental Mode – Compared the top 25 station pairs to assist with model calibration

APPROACH 3: Linear Regression Mode – Statistical test to determine significance of variables and to estimate coefficients

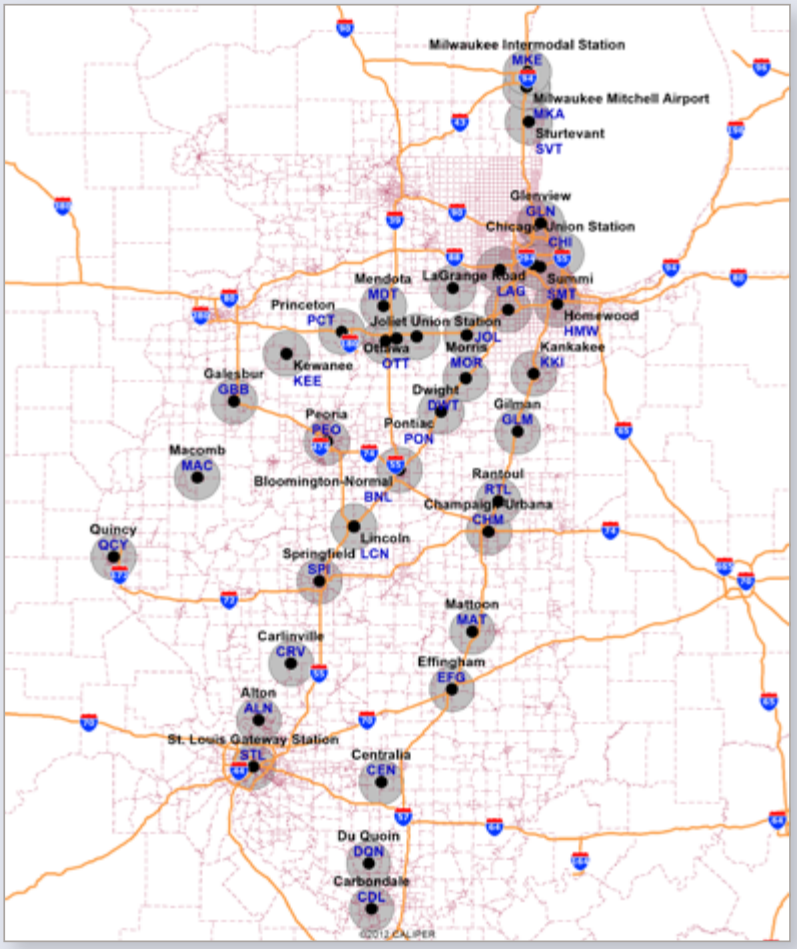
APPROACH 4: Simple ratio from stations with similar populations

Ridership forecast for 2019 were determined to be 440, 540 & 820 riders per day with the average at 600 riders per day. It should be noted that these forecasts assumed 5 round trips at 90mph.

APPROACH 1

STOPS SYNTHETIC MODE

- Census (CTPP) data
- Existing Amtrak routes schedule and ridership counts
- Statewide Travel Demand Model forecasts of demographic growth
- Proposed Peoria Line (90 mph speed option)



APPROACH 2

STOPS INCREMENTAL MODE

- Top 25 ridership counts between station pairs provided by IDOT
- Constructed trip table and used by STOPS to help on calibration

Station 1	Station 2	Ridership	Daily
CHI	MKE	565,825	1,550
CHI	STL	174,537	478
CHI	MKA	171,886	471
CHI	BNL	150,606	413
CHI	CHM	111,695	306
CHI	SPI	91,964	252
CHI	SVT	73,108	200
GLN	MKE	42,697	117
CHI	CDL	41,604	114
CHI	MAC	36,881	101
CHI	ALN	33,780	93
CHI	GBB	33,111	91
CHI	QCY	24,371	67
CHI	PCT	19,791	54
BNL	JOL	17,640	48
CHI	MAT	17,182	47
JOL	STL	15,620	43
SPI	STL	15,057	41
CHI	EFG	13,417	37
BNL	STL	13,044	36
CHI	MDT	12,122	33
CHI	PON	11,134	31
CHI	KEE	11,112	30
CHI	LCN	11,093	30

APPROACH 1 & 2

STOPS MODEL RESULTS

	Synthetic Mode	Incremental Mode
Total Ridership (Boardings) on Peoria Line	505	
WLK	63	
KNR	320	
PNR	122	
Total Linked Trips on Project	**195**	

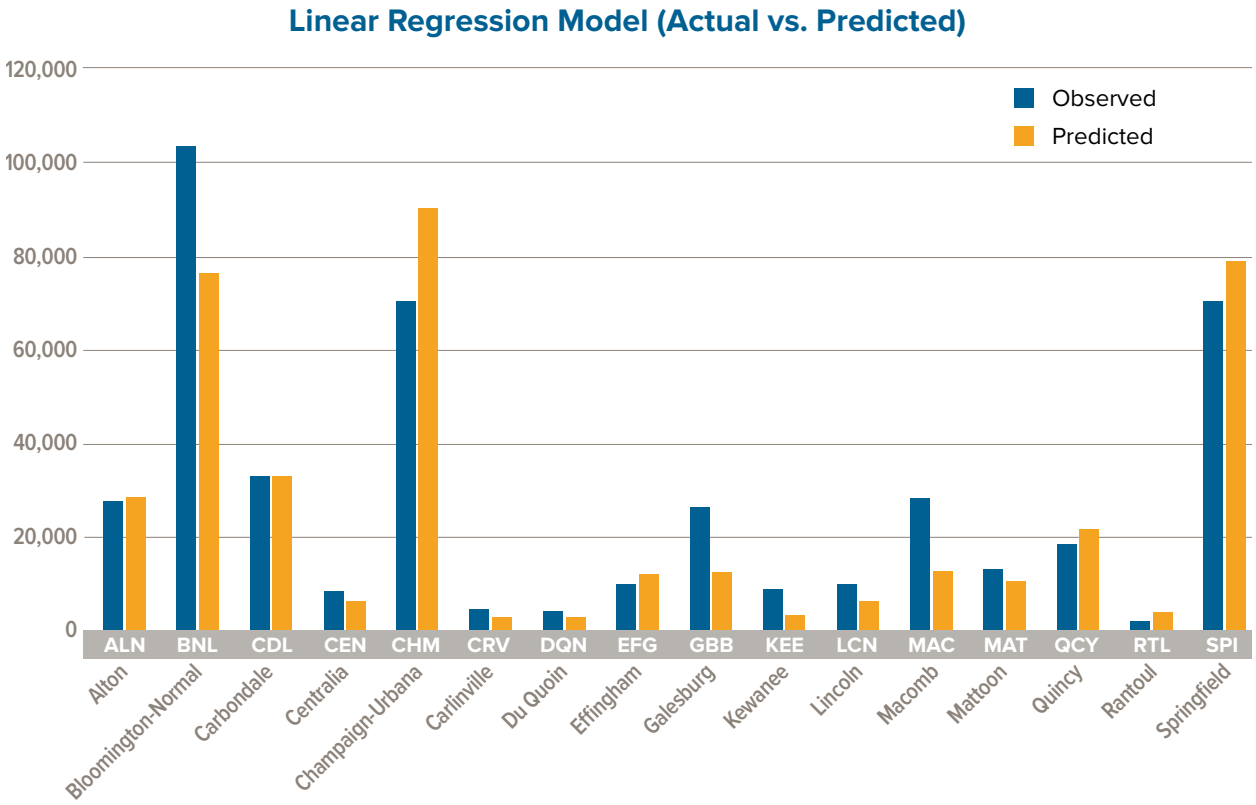
Project Boardings by Purpose by Vehicle Ownership		
Zero Car	50	
1 Car	84	
2+ Car	61	
Total	**195**	

Boarding By Station		
Chicago	124	
Joliet	223	
Morris	2	
Ottawa	37	
Utica	90	
Peru-LaSalle	59	
Peoria	2	
Total	**537**	

APPROACH 3

LINEAR REGRESSION MODEL

- Estimated based on known station area attraction characteristics
- Statistical tests to determine significance of variables and to estimate coefficients



Sta ID	Name	2019 Yearly	2040 Yearly	Growth %	2019 Daily	2040 Daily
MOR	Morris	11,385	15,930	**40%**	31	44
OTT	Ottawa	13,073	14,182	**8%**	36	39
UTC	Utica	35,652	37,382	**5%**	98	102
PER	Peru-LaSalle	13,061	14,467	**11%**	36	40
PEO	Peoria	87,343	96,940	**11%**	239	266
TOTAL		**160,513**	**178,902**		**440**	**490**

APPROACH 4

SIMPLE RATIO FROM COMPARABLE STATIONS WEIGHTED BY POPULATION

		Yearly Riders	Daily Riders	POP 19
BNL	Bloomington-Normal	102,755	282	146,269
CHM	Champaign-Urbana	69,867.5	191	168,744
SPI	Springfield	69,546	191	167,618
SVT	Sturtevant	40,922	112	230,444

		POP 19	Ratio w/ BNL	Ratio w/ SVT
MOR	Morris	47,697	0.33	0.21
OTT	Ottawa	35,483	0.24	0.15
UTC	Utica	53,816	0.37	0.23
PER	Peru-LaSalle	44,398	0.30	0.19
PEO	Peoria	246,148	1.68	1.07

Sta ID	Name	Factored by Population Ratio with Location	
		Bloomington-Normal	Sturtevant
MOR	Morris	92	23
OTT	Ottawa	68	17
UTC	Utica	104	26
PER	Peru-LaSalle	85	22
PEO	Peoria	474	120
TOTAL		**823**	**208**

Layover Facility

Peoria will require a train crew facility and equipment layover facility for storage of the trains. In addition to storage, fueling, cleanout and resupply services will be required as well as shuffling cars in the event of last-minute issues. Since the working assumption is that the service will be operated by Amtrak, the layover facility will need to comply with Amtrak standards and requirements. No specific location has been identified at this time.

Stations

New stations or former Rock Island Railroad station rehabilitation will be required at Peoria, LaSalle-Peru, Ottawa and Morris. A platform only is proposed at Utica for the flag-stop. Stations would be built under this project with input from the local community and maintained by the local community to have local pride of ownership. Parking facilities are included in the feasibility costs.

Equipment

This study anticipates using the current IDOT trainset design set for Chicago to Rockford and Chicago to Quad Cities. An engine unit, a café/business car and two coaches.

Cost Estimate

Below you will find the cost breakdown of the feasibility estimate of “order of magnitude” costs based on non-invasive techniques. Soft costs are estimates as a percentage of the “raw cost” of the construction done either by contractor or railroad. These costs include funding exploration, train modeling, environmental documentation including public involvement, preliminary and final design, overall program management and construction management. Due to the high level of conceptual study this estimate entails a 40% contingency percentage has been assigned. As data is confirmed this will be reduced.

COST ESTIMATE - MARCH 2022		
ELEMENT	**ESTIMATE**	**COMMENTS**
Bridges/structures	$150,000,000	*82 spans; $50M for Des Plaines River Bridge*
Mainline Rehabilitation	$363,000,000	*121 miles*
Mainline/Siding construction	$30,000,000	*3 - 3 mile sidings*
Connections	$28,000,000	*Joliet to CN or Rock Island to CUS*
Layover Facility	$20,000,000	*Peoria*
Stations	$25,000,000	*Peoria, Peru-LaSalle, Utica, Ottawa, Morris*
Grade Crossings	$188,000,000	*110 public, 104 private*
Signals & Communications	$413,000,000	*CTC & PTC*
Trainsets	$234,000,000	*10 Trainsets*
ELEMENT SUB TOTAL	**$1,451,000,000**	
Soft Costs (25%)	$363,000,000	*Plannning, Environmental, Design, PM, CM*
PROJECT SUB TOTAL	**$1,814,000,000**	
Contingency (40%)	$726,000,000	
TOTAL (2022 DOLLARS)	**$2,540,000,000**	

Exclusions to the Cost Estimate

COSTS BETWEEN JOLIET AND CHICAGO

Since the route from Joliet to Chicago has not yet been determined, the capacity needs of either Metra, CRL and NS or Metra and CN are not included as the owning (Host) railroads have not been consulted at this stage of the study.

PROPERTY/FACILITY REPLACEMENT COSTS

This item mostly pertains to one of the two alternatives for the connection to CUS. The larger item included is the cost to replace the Joliet Correctional Facility as the connection in Joliet from Metra to CN would use that property.

HOST RAILROAD CAPACITY NEEDS

As mentioned above, the owning railroads have not been consulted on this project, but it can be assumed that all of them would require additional capacity improvements to maintain their existing service and be able to efficiently handle the passenger traffic that would result.

HOST RAILROAD MAINTENANCE COSTS

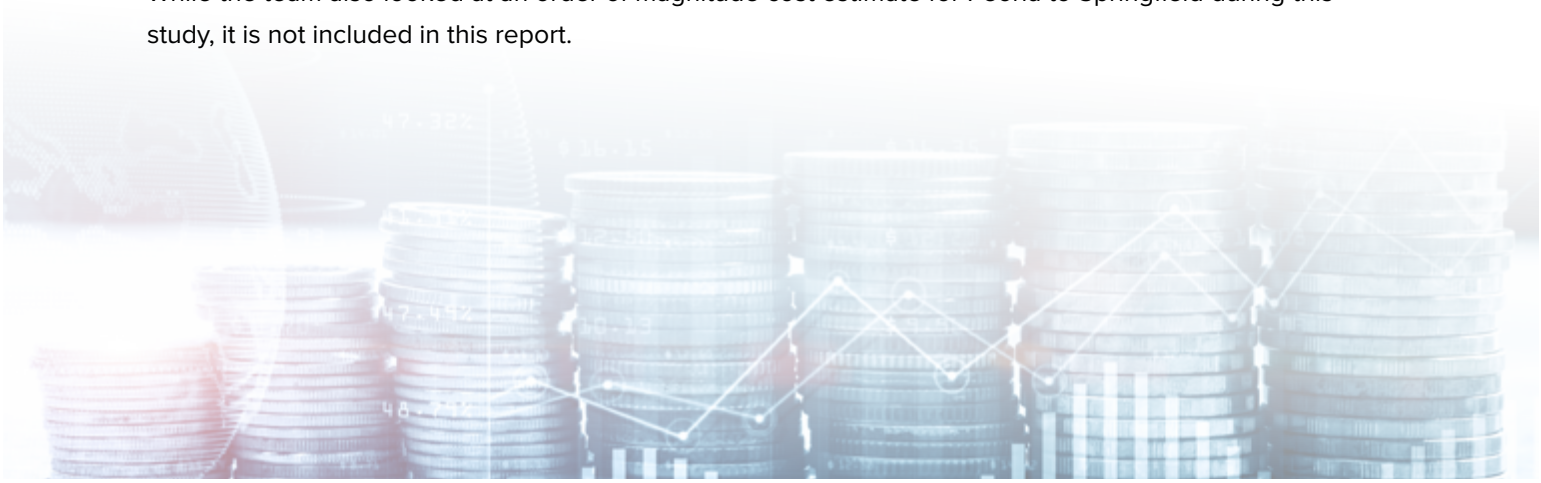
The Host Railroads will have additional maintenance costs as a result of higher speeds and additional equipment such as signal systems, grade crossing protection systems and additional track infrastructure to maintain.

PASSENGER TRAIN OPERATING COSTS

With the assumption that Amtrak will be the operator of this service and it is less than 750 miles, the state that sponsors the service will be required to fund Amtrak operating costs for items such as Onboard services, wi-fi, crew costs and station operating costs.

PEORIA TO SPRINGFIELD

While the team also looked at an order of magnitude cost estimate for Peoria to Springfield during this study, it is not included in this report.



Next Steps

LEAD AGENCY

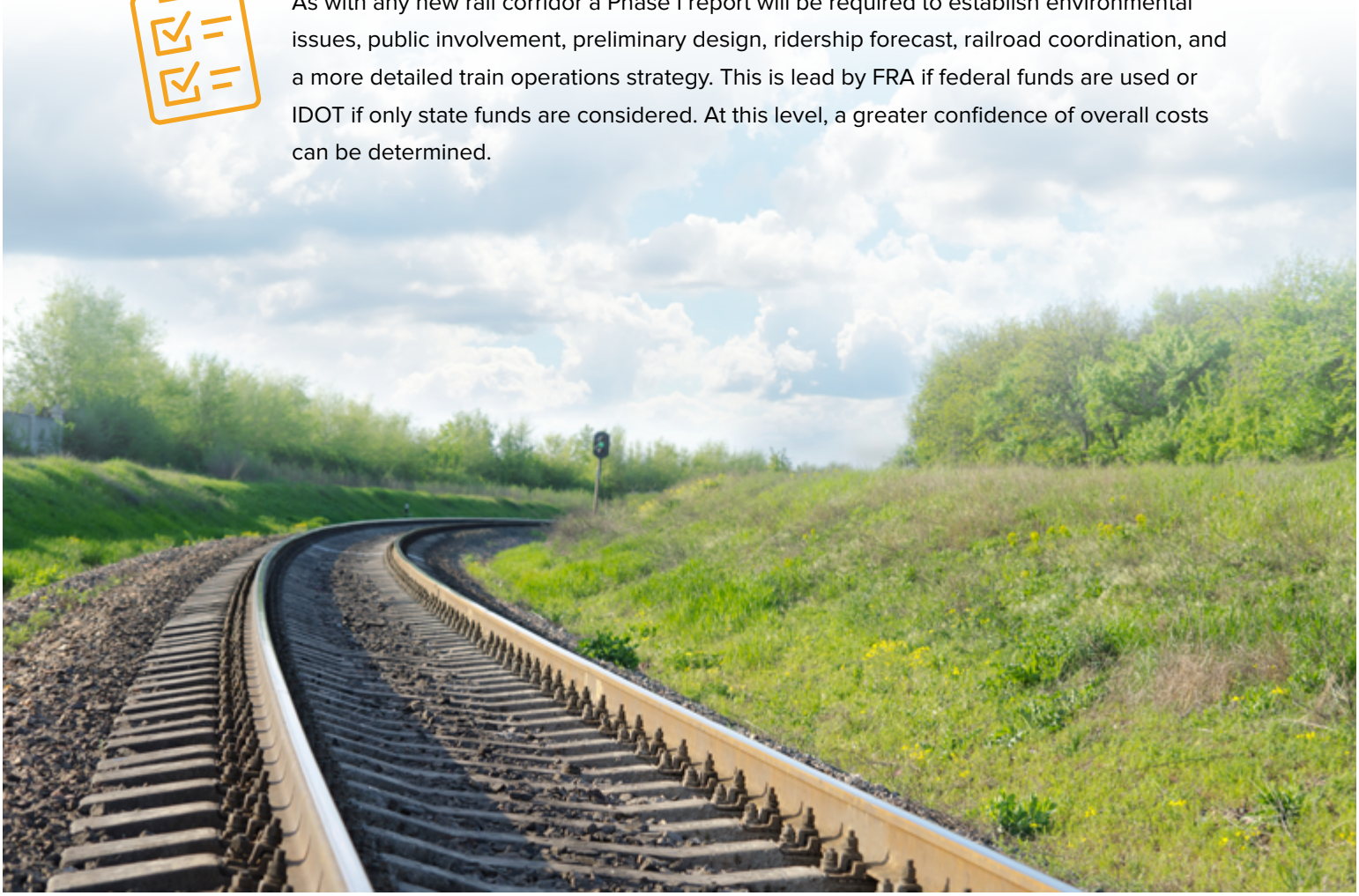
While The City of Peoria and surrounding counties and communities have championed this study, a lead agency is needed to coordinate the required actions to move forward with the Federal Railroad Administration (FRA). This can be IDOT or a newly established partnership through IGAs or possibly an MOU for Grant application, consultant hiring, etc.

GRANT APPLICATIONS

It is anticipated that a grant application will be made to FRA's Corridor Identification and Development Program or Corridor ID Program. This program is to facilitate the development of intercity passenger rail corridors.

PHASE I REPORT

As with any new rail corridor a Phase I report will be required to establish environmental issues, public involvement, preliminary design, ridership forecast, railroad coordination, and a more detailed train operations strategy. This is lead by FRA if federal funds are used or IDOT if only state funds are considered. At this level, a greater confidence of overall costs can be determined.



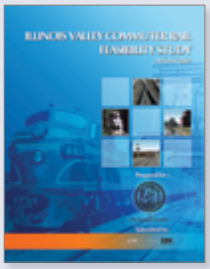
CITY OF PEORIA

Greater Peoria Area
PASSENGER RAIL SERVICE

APPENDIX A

Previous Studies

Illinois Department of Transportation

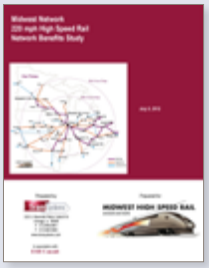


Illinois Valley Comuter Rail Feasibility Study, 2003

https://cityofottawa.org/wp-content/uploads/pdfs/IVCR.pdf

Feasibility Report Of Proposed Amtrack Service Chicago — Peoria, 2011

https://tricountyrpc.org/wp-content/uploads/AMTRAK-STUDY_web.pdf



Midwest Network 220 mph High Speed Rail Network Benefits Study, 2012

https://hsrail.org/sites/default/files/studies/MHSRA_TranSystems_2012.pdf

Commuter Rail for Central Illinois Feasibility Study, 2013

https://tricountyrpc.org/wp-content/uploads/CommuterRailCntrIIL_web.pdf

2017 Illinois Rail Plan Update

https://idot.illinois.gov/Assets/uploads/files/Transportation-System/Fact-Sheets/Rail%20Plan%20Report_12_28_2017_FULL_Final_FRA.pdf

Midwest Regional Rail Plan 2021

https://railroads.dot.gov/sites/fra.dot.gov/files/2021-10/Final%20Report-MWRRP%20with%20Appendices%20PDFa.pdf

CITY OF PEORIA

Greater Peoria Area
PASSENGER RAIL SERVICE

APPENDIX B

Survey Report

Illinois Department of Transportation

CITY OF PEORIA

Greater Peoria Area
PASSENGER RAIL SERVICE

PEORIA-CHICAGO PASSENGER RAIL FEASIBILITY STUDY

Public Interest Survey *RESULTS REPORT*

MARCH 2022

Illinois Department of Transportation

The Greater Peoria area has long been interested in establishing passenger rail service for the central Illinois region. Working with the Illinois Department of Transportation (IDOT), a consultant was retained to conduct a feasibility study to evaluate passenger rail service between Peoria and Chicago. The consultant has been working with a Passenger Rail Committee established in August 2021 by Peoria Mayor Rita Ali. The committee is made up of local and regional leaders including:

- City of Peoria Mayor Rita Ali
- 17th District US Representative Cheri Bustos
- 18th District US Representative Darin LaHood
- 46th District Illinois State Senator Dave Koehler
- 92nd District Illinois State Representative Jehan Gordon-Booth
- 73rd District Illinois State Representative Ryan Spain
- City of Peoria Councilman At-Large Sid Ruck Riegel
- Former U.S. Secretary of Transportation Ray LaHood
- North Central Illinois Council of Governments Executive Director Kevin Lindeman
- Tri-County Regional Planning Commission Executive Director Eric Miller
- IDOT Secretary of Transportation Omer Osman
- City of LaSalle Mayor Jeff Grove
- City of Morris Mayor Chris Brown
- Village of North Utica President David Stewart
- City of Ottawa Mayor Dan Aussem
- City of Peru Mayor Ken Kolowski
- LaSalle County Chairman Don Jensen
- Peoria County Board Chairman Andrew Rand
- Bradley University Executive Director Brad McMillan
- West Central Illinois Building and Construction Trades Council Representative Matt Bartolo
- Greater Peoria Economic Development Council CEO Chris Setti
- Discover Peoria CEO J.D. Dalfonso
- Illinois Valley Chamber of Commerce CEO Bill Zens
- Peoria Area Chamber of Commerce CEO Joshua Gunn
- Peoria County Administrator Scott Sorrell
- City of Peoria City Manager Patrick Urich
- City of Ottawa Economic Development Director David Noble
- City of Ottawa Tami Koppen

Working with the committee, a potential route was identified with potential stops in Peoria, LaSalle-Peru, Ottawa, Morris, Joliet, and Chicago. Upon selection of the route, the Passenger Rail Committee was expanded to include representatives from communities along the corridor. The committee believes that passenger rail service would enhance the transportation system of the greater Peoria region and Central Illinois, provide an additional mode of transportation, support anticipated growth, improve regional connectivity, promote opportunities for businesses and tourism, and support diversity, inclusion, and equity in transportation throughout the region.

As a means of gathering input, a public interest survey was launched on Tuesday, January 25, 2022. The survey was kicked-off with a press conference held at Peoria City Hall at 10:00 am the same day. Speakers at the event included Mayor Ali, Councilmen Ruck Riegel, Mr. Miller, Mr. Gunn, and Mr. Dalfonso. Media outlets in attendance included: WEEK/HOI TV, WMBD TV, WMBD Radio,

WCBU Radio and the Peoria Journal Star. The press conference generated significant media coverage. News stories about the announcement appeared on network affiliate television news, the Peoria Journal-Star, Peoria public radio, and in other media outlets throughout the Peoria region. The survey was further promoted through media in other potential service areas, including LaSalle-Peru, Ottawa, Morris, Joliet, and Chicago.

In addition to the press conference, social media posts were created, an ad was placed in the Peoria Journal Star on January 29, 2022, an eblast was sent out to over 1500 individuals on the stakeholder list, and 200 posters were placed in public buildings, higher education facilities, and private businesses throughout the region. Electronic letters were sent to 71 organizations requesting their assistance in sharing information and posts about the survey.

The survey was available electronically from January 25 through February 28, 2022. The survey and related promotional activities generated extraordinary public interest and response, with a total of 31,209 responses received.

The majority of the responses, 88%, were received in the first week the survey was open. Most of those completing the survey (85%) did so in 1 – 4 minutes. iOS (Apple) was the most used operating system and 55% of the surveys came through a Facebook link.

The Passenger Rail Interest Survey was made up of ten questions that were created to assess the viability of new passenger rail service between Peoria to Chicago, with service to include potential intermediate stops in LaSalle-Peru, Ottawa, Morris, and Joliet, providing regional connectivity. Survey questions focused on the likelihood and frequency of use, destinations, purpose of use, price points, and travel time. Additional questions gathered demographic information, including age, zip code, and ethnicity.

With strong public response, the online survey provided valuable input into the viability of Greater Peoria Area Passenger Rail Service. More than 80 percent of respondents indicated they would be “likely” or “very likely” to utilize the rail service, signifying widespread interest in the initiative. While not all respondents opted to become part of the project mailing list, more than 50 percent provided personal information to stay involved and informed of the initiative.

The following introduction was made to survey participants before getting into the questions.

The following survey will be used by the Illinois Department of Transportation and local leaders to assess the viability of new passenger rail service through Peoria to provide regional connectivity. Your answers will help inform critical decisions regarding route viability and frequency of service.

Passenger trains provide a safe and convenient form of transportation. Riding the train allows you time to relax, read a book, or get some work done using on board free Wi-Fi service, not to mention the reduced stress from driving in traffic and parking fees at your destination.

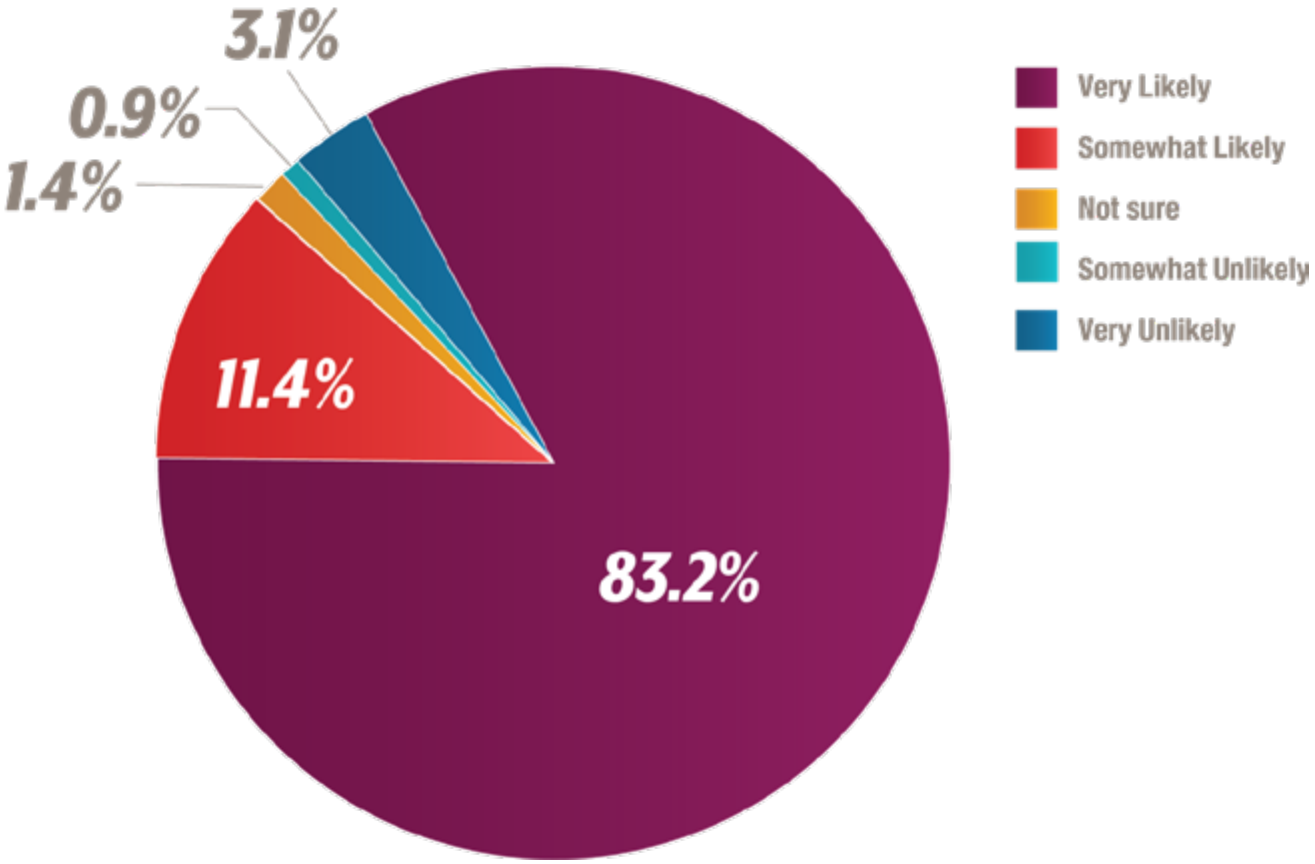
This survey will only take a few minutes of your time, do your best to answer all questions. Personal information obtained through this survey will be kept confidential.

Thank you for helping the greater Peoria area and Central Illinois take the next step in the future of our transportation system.

The results of the survey are depicted below.

Q1: Probability - If Amtrak provided service from Peoria to Chicago and back, stopping at LaSalle/Peru, Ottawa, Morris, and Joliet along the way, how likely would you be to ride the train?

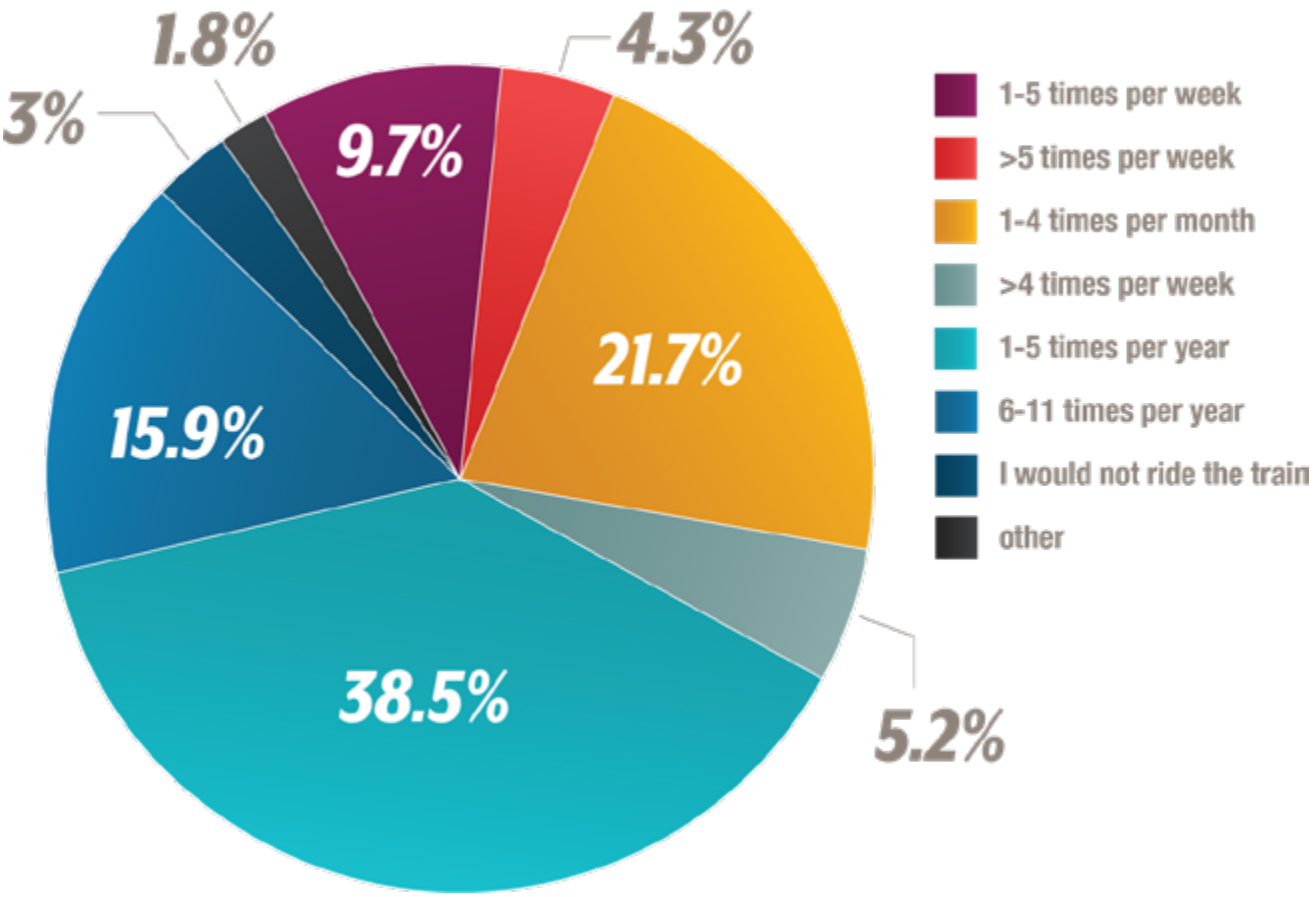
Question one measures the likelihood of respondents using the proposed Amtrak service. This baseline question was critical for determining whether the necessary interest exists to continue exploration of passenger rail service. As noted above, a large majority 83.2% (25,967) of 31,209 respondents indicated they would be “very likely” to use the service. In addition, another 11.4% (3,570) respondents said they would be “somewhat likely” to utilize the service. When combined, nearly 95% of respondents (29,537) indicated their use of the service was likely. Conversely, 3.9% (1,224) respondents said they were “somewhat unlikely” or “very unlikely” to use the service. Just 1.4% (448) were not sure if they would ever ride the train.



Q2: Frequency – How often might you ride the train?

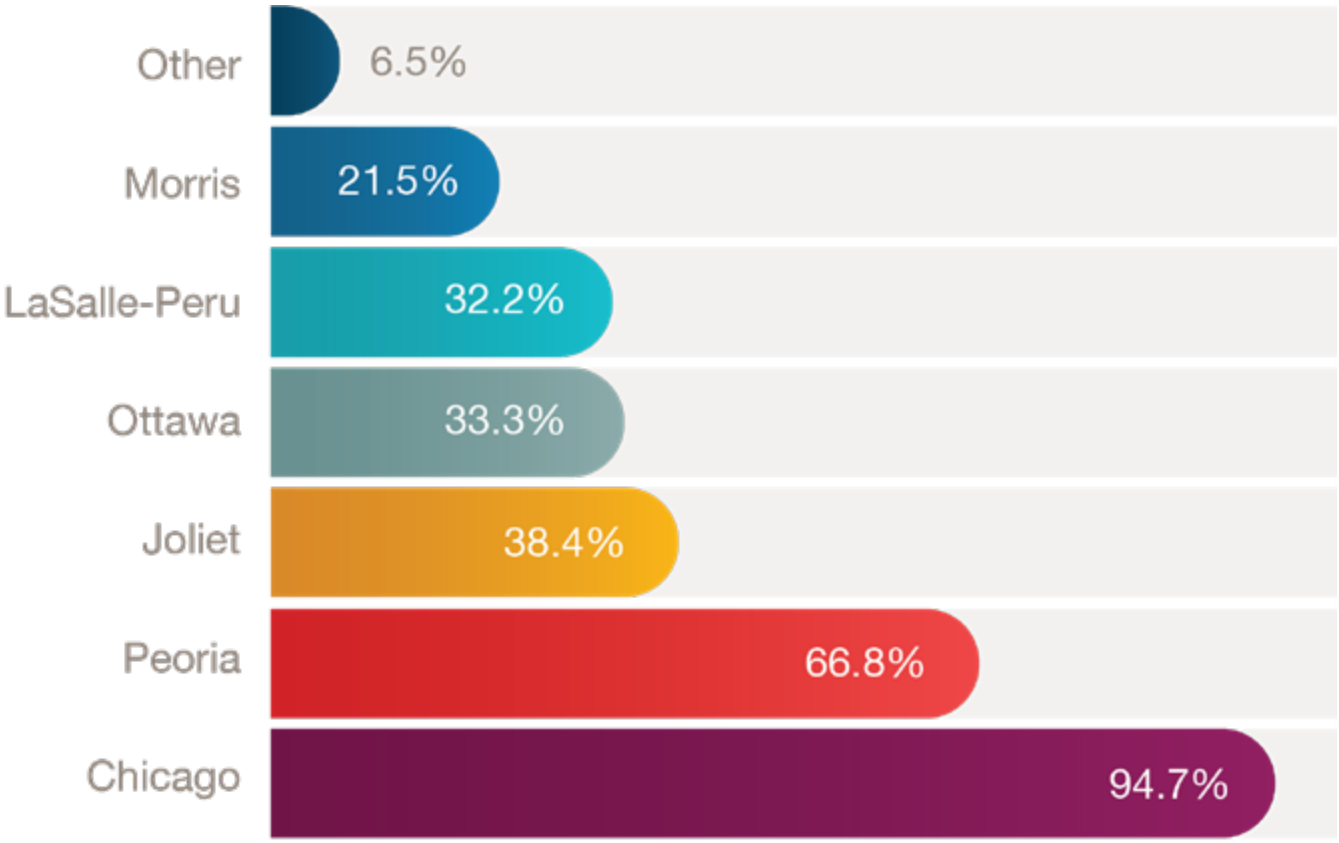
Question two delves into potential use of passenger rail service, with respondents indicating the expected frequency of their trips. Of the 31,209 respondents 38.5% (12,001) said they expect they would use the service one to five times per year, 21.7% (6,771) would ride the train one to four times per month, 15.9% (4,950) would ride the train six to eleven times per year, 9.7% (3,034) would ride the train one to five times per week, 5.2% (1,624) would ride the train more than four times per month, and 4.3% (1,342) would ride the train more than five times per week. It is also notable that just 3% (934) respondents said they would never ride the train, further documenting widespread interest in the service.

Respondents were given the opportunity to provide their own answers to this question and 1.8% (557) did just that. These answers ranged from if I could afford it, a few times a year with a family, and if dogs are allowed, to it's easier to drive, the stations would not be convenient, and a train will bring Chicago crime to our neighborhoods. Respondents also provided their own estimate of how many times they would ride the train and stated everywhere from every few years to 1 million times a day. Of the 557 responses 56 are not realistic answers, but even if these responses are excluded from the evaluation, the overall results do not change.



Q3: Destinations – If service was available to the following locations, which would you visit using the train? (Select all that apply.)

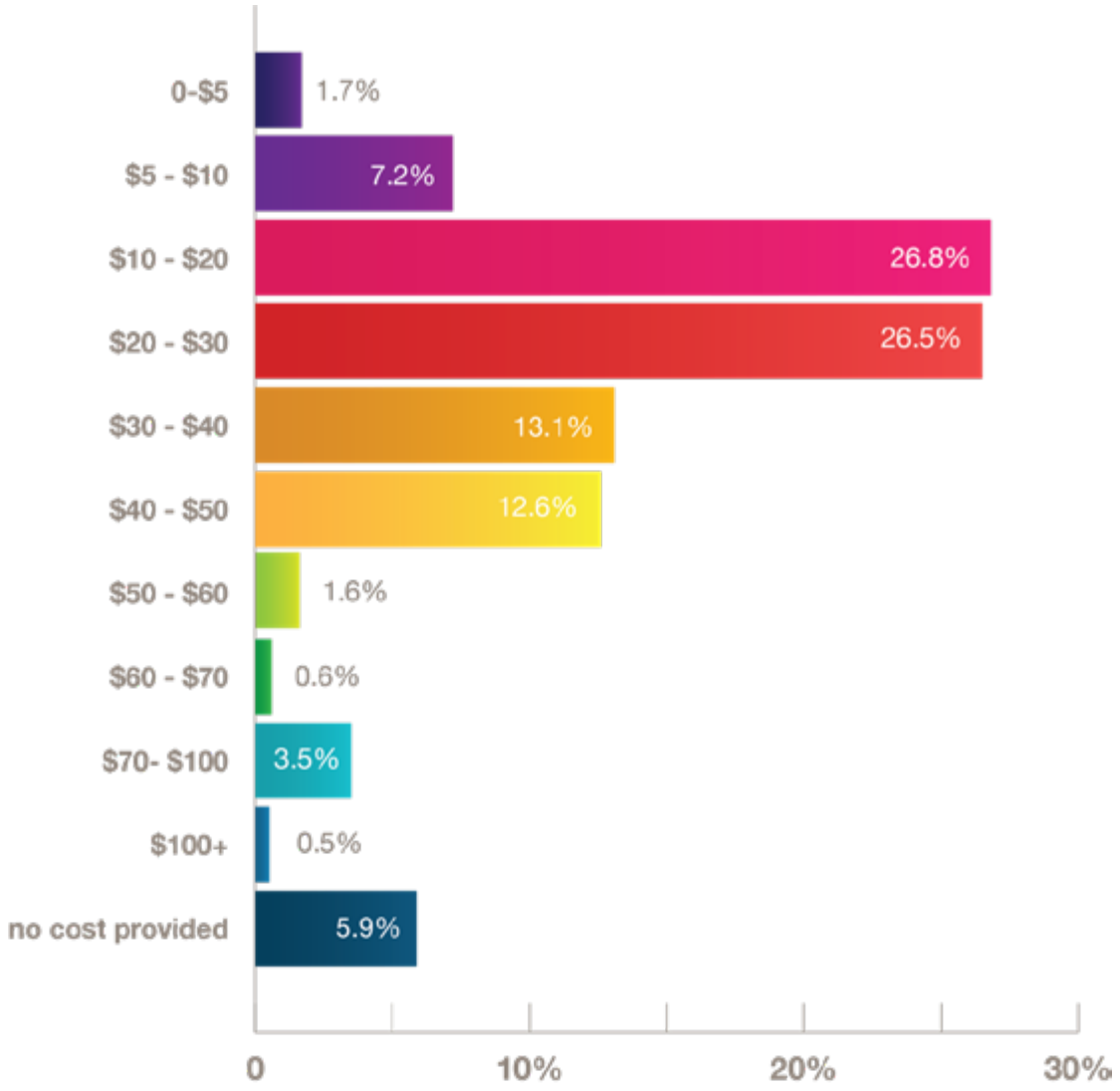
Question three explores potential destinations for rail travel. A total of 30,275 participants responded to this question. Respondents selected all destinations they would expect to visit using passenger rail service from Peoria to Chicago, with stops at LaSalle/Peru, Ottawa, Morris and Joliet. Chicago was the top destination selected, with 94.7% (28,668) indicating they would use rail service to access the city. In addition, 66.8% (20,229) respondents indicated they would travel to Peoria. Responses for other destinations included Joliet 38.4 % (11,631), Ottawa 33.3 % (10,068), LaSalle-Peru 32.2% (9,734) and Morris 21.5% (6,514). 6.5% (1,965) of respondents named “other” destinations. Write-in answers included Aurora, Bloomington/Normal, Champaign, Chicago airports, Chillicothe, Galesburg, Milwaukee, Naperville, Princeton, Quad Cities, Rockford, St. Louis, Streator, Utica, and many other cities mentioned.



Q4: Cost – How much would you pay for a one-way ticket from Peoria to Chicago?

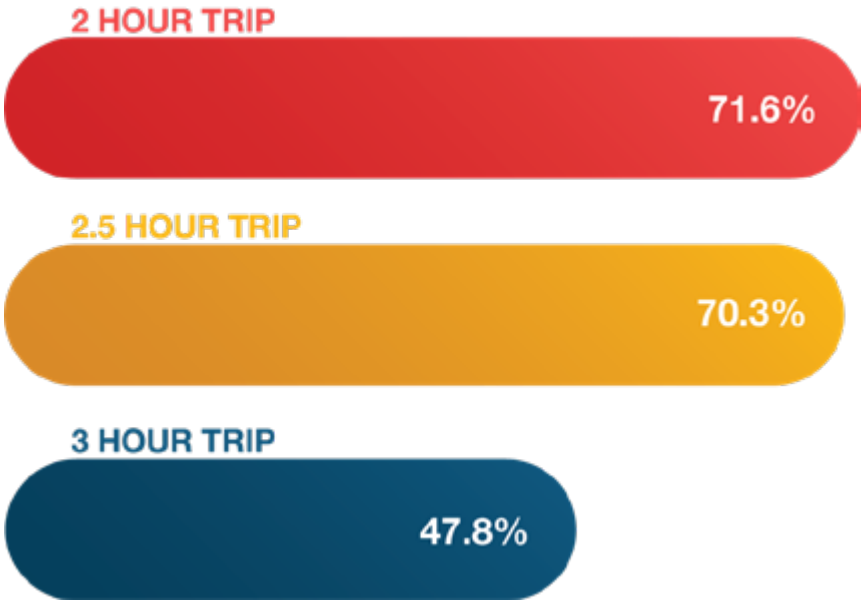
Question four was designed to measure potential price points for travel from Peoria to Chicago. The question was open ended, allowing respondents to provide a maximum price they would pay, or offer a cost range for the 160-plus mile one-way trip. 30,275 responses were received, with 26.8% (8,108) indicating they would pay between $10.01 - $20.00 for the ticket, and very close behind 26.5% (8,027) indicated they would pay between $20.01 - $30.00. They next price points were also very close with 13.1% (3,962) stating they would pay $30.01 - $40.00 and 12.6% (3,829) stating they would pay $40.01 - $50.00. This was followed by 7.2% (2,186) willing to pay $5.01 - $10.00, 3.5% (1,059) willing to pay $70.01 - $100.00, 1.7% (506) wanting to pay nothing to $5.00, and .5% (139) willing to pay greater than $100.01.

5.9% (1,788) provided a range of answers that did not include a dollar amount. Comments included being unsure, market price, Metra rates, affordable, cost, any, flexible, the same as/less than a tank of gas, cheaper than Uber, and cheaper than air fare.



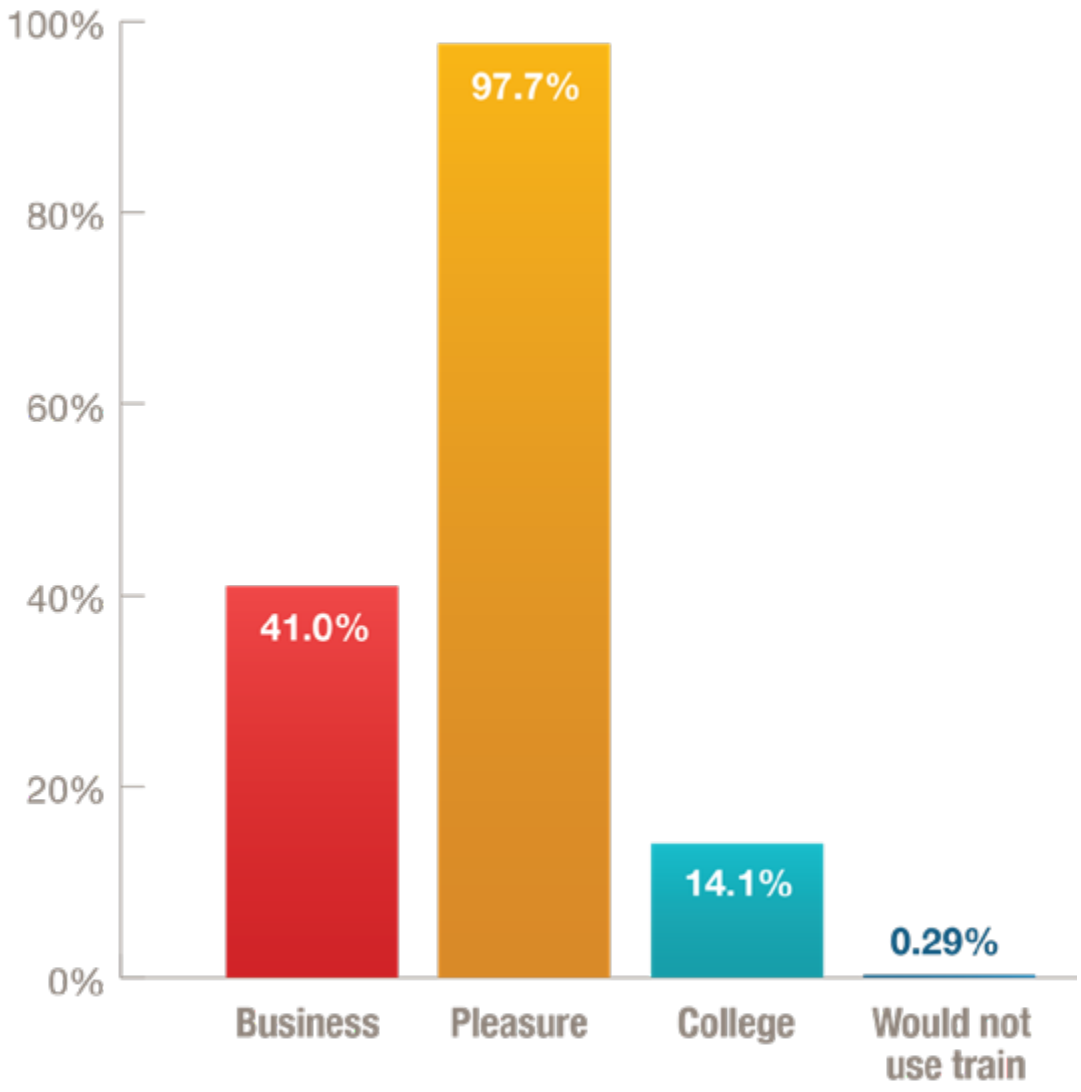
Q5: Travel Time – Could you see yourself riding the train if a one-way trip from Peoria to Chicago took 2 hours, 2.5 hours, or 3 hours ? (Select all that apply)

This question was designed to measure the amount of time travelers would be willing to ride for a one-way trip from Peoria to Chicago. This question received 30,275 responses. Respondents seemingly made little distinction between a 2-hour trip and a 2.5-hour trip, with 71.6% (21,682) respondents selecting the shorter window, and 70.3% (21,282) respondents saying they could envision riding for 2.5 hours. Perhaps not surprisingly, a three-hour trip received the lowest rate of response, with 47.8% (14,479) participants.



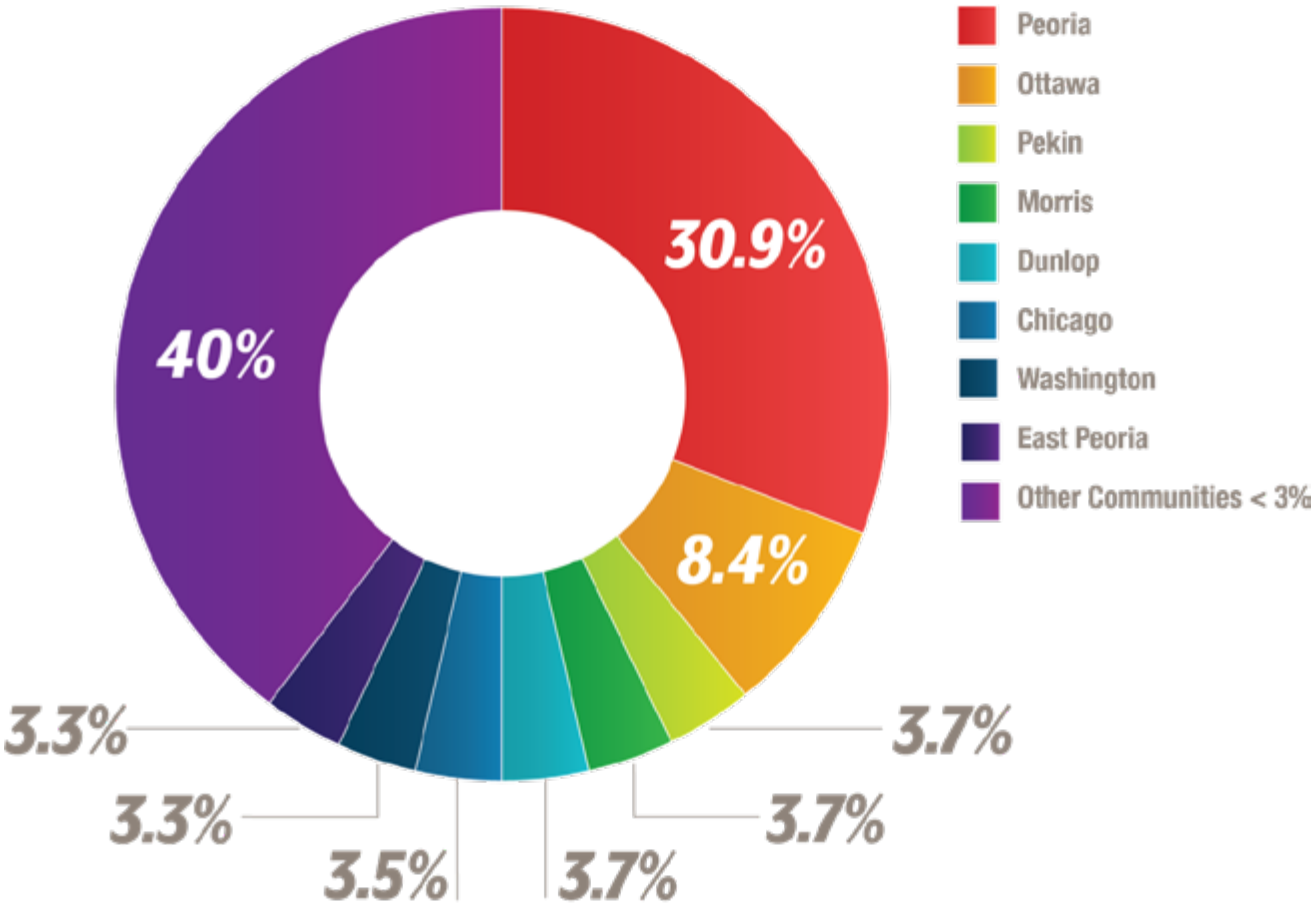
Q6: Usage – What would you use the train for? (Select all that apply)

This survey question explores the potential purpose of rail travel. Of the 30,275 respondents to this question, a substantial majority 97.7% (29,565) anticipate traveling by train for pleasure. Additionally, 41% (12,400) expected to ride the train for business, while 14.1% (4,259) said they envision using rail to get to and from college. While educational purposes are lower ranked today, it can be expected to grow as secondary education institutions adapt and promote the option of rail service to their campuses. At the same time, just .3% (87) said they would not use the train at all.



Q7: Geographic – What is your zip code?

Geographic information was sought in question seven to identify the locations of survey respondents. A total of 1,099 unique zip codes were submitted in the survey, with the majority of respondents 30.9% (9,627) tied to the Peoria-area zip codes. Secondarily, the highest number of responses were submitted from the Ottawa zip code with 8.4% (2,605). Other communities with the highest responses include Pekin 3.7% (1,159), Morris 3.7% (1,153), Dunlop 3.7% (1,145), Chicago 3.5% (1,096), Washington 3.3% (1,016), and East Peoria 3.3% (1,014). The remainder of the communities had less than 3% responses. Only .1% submitted data that was not a valid zip code.

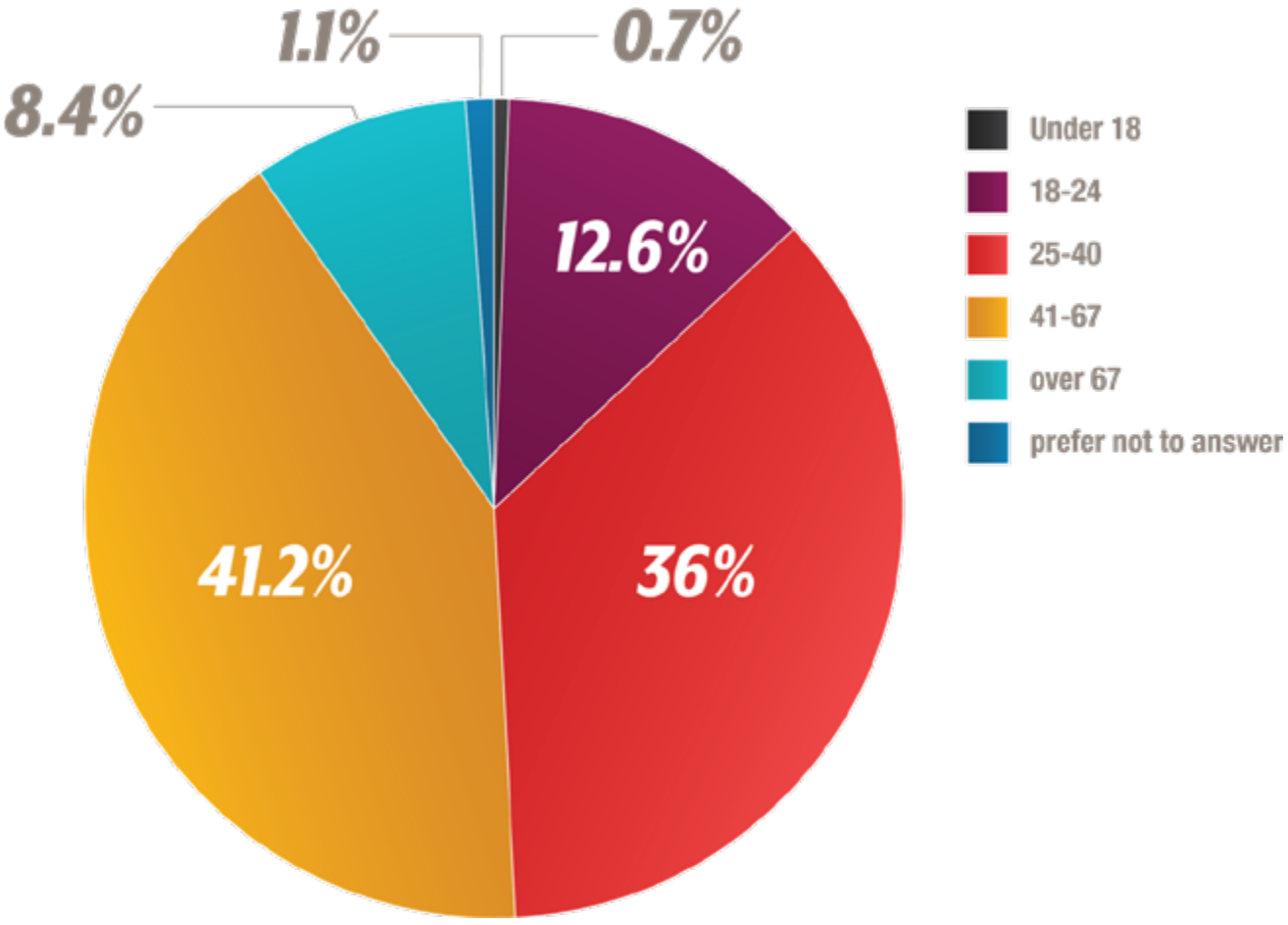


Q8: Mailing list – Please complete the following if you would like to be added to the mailing list to receive updates on Peoria Passenger Rail Service.

This question invited respondents to enter personal contact information to be added to the mailing list to receive updates on Peoria Passenger Rail Service. 34.4% of respondents (10,736) registered with an address and/or email address, creating a direct communication line with stakeholders for project updates, information, and future events.

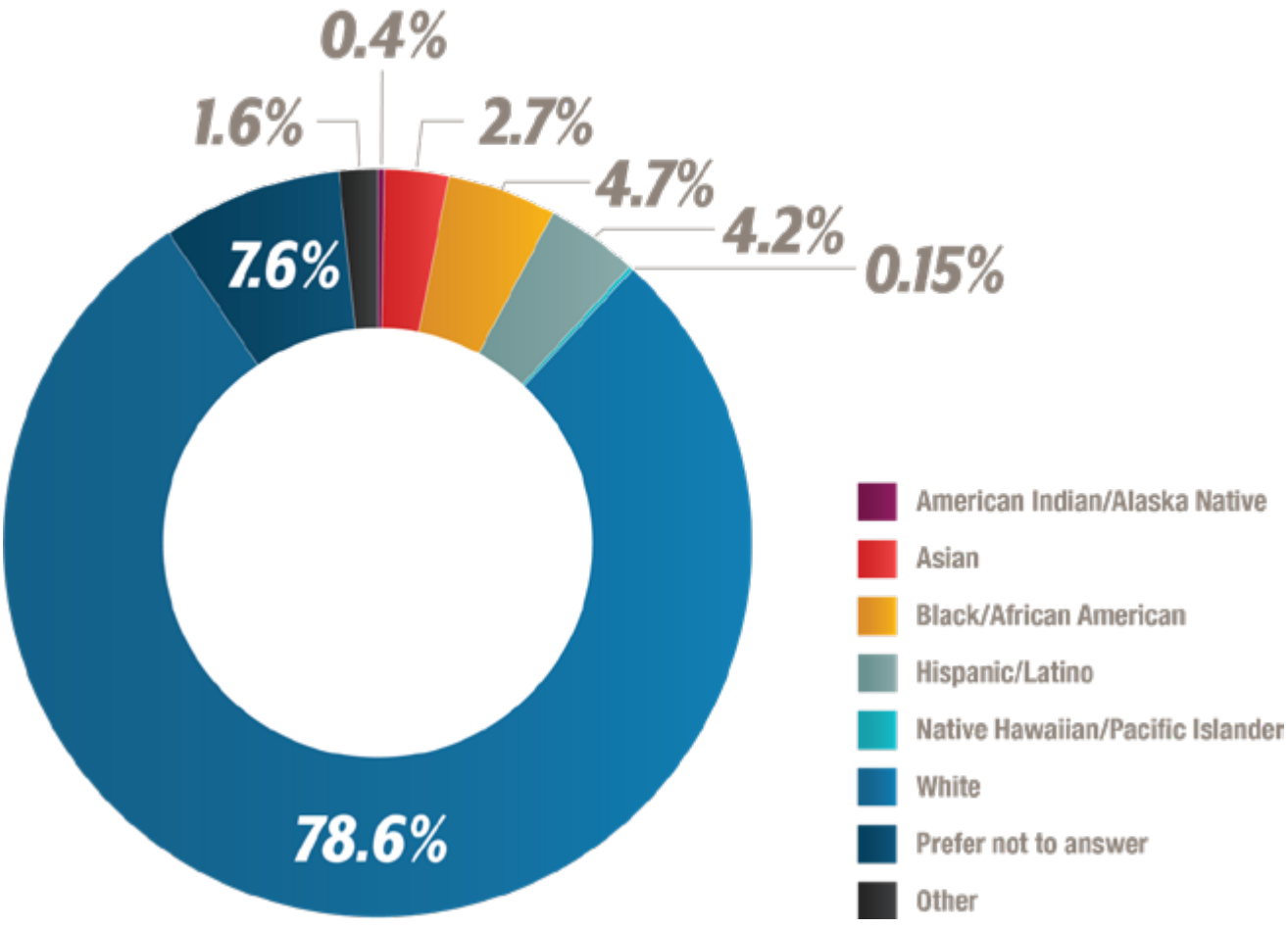
Q9: Demographic – What is your age range?

This question assists the study through demographic information. The highest number of respondents, 41.2% (12,869) were between 41-67 years old, followed closely by those 25 – 40 years old at 36% (11,224). Combined, those designations accounted for more than three-quarters of respondents. An additional 12.6% (3,923) of respondents were 18 - 24 years old, while 8.4% (2,628) were over 67 years old, and .7% (228) were under 18. Only 1.1% (337) of respondents preferred not to answer the question.



Q10: To acquire balanced representation, please tell us your ethnicity.

This question further gathers demographic information. Just over three-fourths majority 78.6% (24,531) of respondents identified as White. Those identifying as Black or African American included 4.7% (1,456), followed closely by those identifying as Hispanic or Latino at 4.2% (1,316). 2.7% (855) of respondents identified as Asian and 1.6% identified as Other. Less than one percent of respondents identified as American Indian/Alaska Native (.4%, 127) and Native Hawaiian/Pacific Islander (.2%, 48). Of those participating in the survey 7.6% (2,367) preferred not to answer the question.



CITY OF PEORIA

Greater Peoria Area
PASSENGER RAIL SERVICE

APPENDIX C

Ridership Forecast Report

Illinois Department of Transportation

Chicago to Peoria Passenger Service Ridership Forecast Report

June 2022

Kimley»Horn

Table of Contents

List of Figures

List of Tables

1. Introduction

The Greater Peoria area has been interested in establishing passenger rail service for the Central Illinois region connecting with the greater Chicago area. Illinois Department of Transportation (IDOT) retained consultant team to conduct a feasibility study to evaluate passenger service between Peoria and Chicago. Under the feasibility study, a ridership study was conducted to evaluate potential ridership between Chicago and Peoria. The purpose of this report is to provide a summary of the ridership study methodology and the study results.

2. Proposed Passenger Service

There are two service scenarios analyzed in this study: the Existing (No Build) scenario and the Build scenario. This section explains each of the scenarios and assumptions used for estimating ridership.

2.1. Existing (No Build) Scenario

The Existing (No Build) scenario represents the actual services provided by Amtrak within the state of Illinois by end of year 2019. For the Existing Scenario, four routes operate in the state, as shown in **Figure 1:**

- Hiawatha Service, which operates between Chicago Union Station (CHI) and Milwaukee Downtown Intermodal Station (MKE), with interim stops at Glenview (GLN), Sturtevant (SVT), and Milwaukee Airport (MKA).
- Lincoln Service, which operates between Chicago Union Station (CHI) and St. Louis Gateway Station (STL), with interim stops at Summit (SMT), Juliet (JOL), Dwight (DWT), Pontiac (PON), Bloomington-Normal (BNL), Lincoln (LCN), Springfield (SPI), Carlinville (CRV), and Alton (ALN).
- Illini Service, which operates between Chicago Union Station (CHI) and Carbondale Station (CDL), with interim stops at Homewood (HMW), Kankakee (KKI), Gilman (GLM), Rantoul (RTL), Champaign-Urbana (CHM), Mattoon (MAT), Effingham (EFG), Centralia (CEN), and DuQuoin (DQN).
- Zephyr Service, which operates between Chicago Union Station (CHI) and Quincy Station (QCY), with interim stops at La Grange Road (LAG), Naperville (NPV), Plano (PLO), Mendota (MDT), Princeton (PCT), Kewanee (KEE), Galesburg (GBB), and Macomb (MAC).

The No Build scenario is assumed to be the same as the existing scenario, given the fact that no future proposed Amtrak services that serve the new stations proposed as part of the Build scenario.

Figure 1: Existing Amtrak Local Services

2.2. Build Scenario

Ridership was estimated for the Build scenario, which includes the proposed Peoria passenger service. These same assumptions were used to compute the additional annual net cost to implement the proposed services.

2.2.1. Alignment and Stations

The proposed Peoria service will share the existing alignment and stations from Chicago (CHI) to Joliet (JOL), with five proposed new stations from Joliet to Peoria (see **Figure 2**). The new stations are Morris (MOR), Ottawa (OTT), Utica (UTC), Peru-LaSalle (PER), and Peoria (PEO).

2.2.2. Service span and frequency

Peoria passenger service is proposed to operate daily with the service frequency below:

- AM:
    - Northbound to Chicago: three trains from 6:40 to 10:40
    - Southbound to Peoria: two trains from 7:05 to 9:05
- PM:
    - Northbound to Chicago: two trains from 5:05 to 7:05
    - Southbound to Peoria: three trains from 3:30 to 7:30

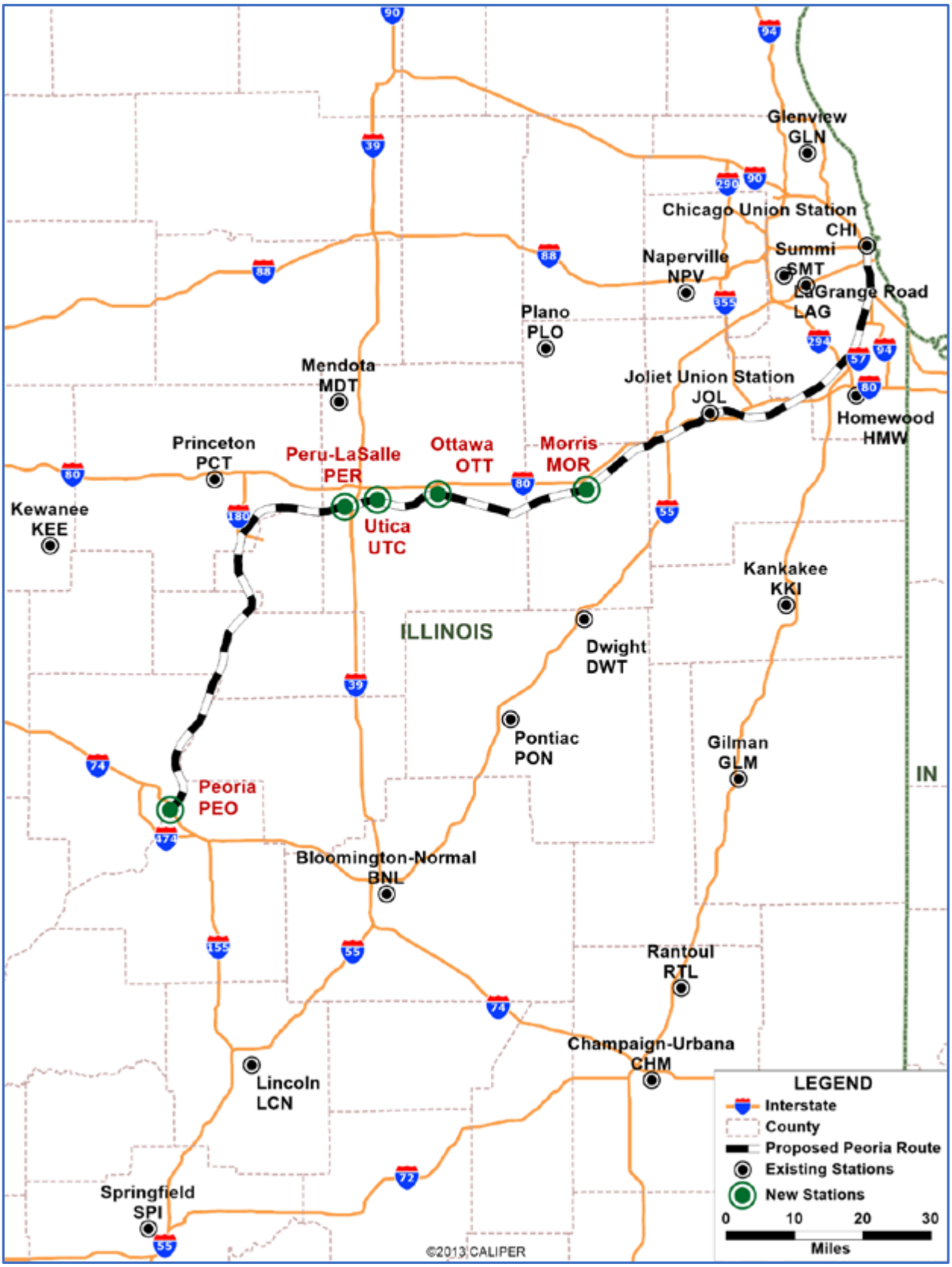


Figure 2: Proposed Peoria Service Route and Stations

2.2.3. Station to Station Travel Times

The project team used schedule information from existing Amtrak services to develop a baseline running time estimate for the proposed Peoria service. A 90-mph maximum speed was used to develop the time table. **Table 1** and **Table 2** below show the outbound and inbound estimated station to station travel times respectively:

Table 1: Estimated Travel Times (Northbound: Peoria to Chicago)

STOP ID	Station	Train 502	Train 504	Train 506	Train 508	Train 510
1	Peoria	6:40	8:40	10:40	17:05	19:05
2	Peru-LaSalle	7:39	9:39	11:39	18:04	20:04
3	Utica	7:47	9:47	11:47	18:12	20:12
4	Ottawa	7:59	9:59	11:59	18:24	20:24
5	Morris	8:19	10:19	12:19	18:44	20:44
6	Joliet	8:39	10:39	12:39	19:04	21:04
7	Chicago	9:17	11:17	13:17	19:42	21:42

Table 2: Estimated Travel Times (Southbound: Chicago to Peoria)

STOP ID	Station	Train 501	Train 503	Train 505	Train 507	Train 509
1	Chicago	7:05	9:05	15:30	17:30	19:30
2	Joliet	7:48	9:48	16:13	18:13	20:13
3	Morris	8:08	10:08	16:33	18:33	20:33
4	Ottawa	8:28	10:28	16:53	18:53	20:53
5	Utica	8:40	10:40	17:05	19:05	21:05
6	Peru-LaSalle	8:48	10:48	17:13	19:13	21:13
7	Peoria	9:42	11:42	18:07	20:07	22:07

3. Ridership Forecasting Methodology and Assumptions

The ridership for the proposed route was evaluated using three methods. Each methodology has limitations and three methods were selected to develop a range of ridership values. For all three methods, the following assumptions and input data used are in common:

- Base and Future Analysis Years

Due to COVID impact on travel demand starting in March 2020, Year 2019 was selected as the base year to representing existing and no build conditions for ridership forecasts. In addition, year 2040 is selected as the 20-year horizon year.

- Demographic and Employment Data

Total population and total employment data within 10 mile and 25 mile buffer of each existing and proposed Amtrak stations were developed using data from IDOT's Statewide Travel Demand Model (STDM). Base year 2019 and horizon year 2040 data was interpolated from the STDM data sets that include 2017, 2020, 2035, and 2045.

- Existing Ridership Data

Existing Ridership Data for base year 2019 was provided by IDOT Passenger Rail Operations Section. Ridership data includes 2019 route and station level boardings for all stations within the state and top pairs of stations with highest number of riders.

The three ridership forecasting methods used in this study were described below.

3.1. Simplified Trips-on-Project (STOPS) software

STOPS model is developed by Federal Transit Administration (FTA) to quickly produce plausible forecasts of transit project ridership using readily available census data, transit ridership and schedule information, and demographic growth forecasts from urban area MPOs.

The current STOPS software version available from FTA is STOPS 2.5 dated October 10, 2019. Synthetic mode and Incremental mode of STOPS was used for this study. Synthetic mode uses Census Transportation Planning Package (CTPP) Journey-to-Work flows to predict transit mode shares. Incremental mode of STOPS uses observed station to station ridership data to supersede CTPP data. For both options, base year 2019 actual ridership counts at station, route, and system levels were used to calibrate the model.

The primary limitation of the STOPS model is that the sample size captured by the underlying CTPP Journey-to-Work data for long distance trips are small. Results from the STOPS model likely under-estimated the trip rates or the transit mode share from communities such as Peoria and Morris.

3.1.1. Demographic and Employment Data

CTPP data based on the 2006-2010 American Community Survey (ACS) is used for STOPS model runs. Total population and total employment data were interpolated from the STDM data from IDOT for existing year 2019 and horizon year 2040.

3.1.2. Travel Time and Distance Skims

Highway travel time and distance skims for the existing and build scenarios were acquired from the Statewide Travel Demand Model.

3.1.3. Transit Service Data

A subset of the Amtrak national network in General Transit Feed Specification (GTFS) data set format was used for STOPS model. Only local routes serving the state of Illinois were included to representing Amtrak's existing transit service network in October 2019. This GTFS dataset is used in the existing and no-build scenario network for this analysis. Average weekday unlinked transit trip counts were provided by IDOT and used in the STOPS model calibration process.

3.1.4. Fixed Guideway Settings

The proposed Peoria passenger service is modeled as Route Type 2 (Rail). Other existing Amtrak routes are modeled as Route Type 2. Default settings for all other STOPS parameters were used in this study.

3.2. Linear Regression Model

The second forecasting method is to estimate a linear regression model based on observed ridership data at existing Amtrak stations and known station area attraction characteristics. The proposed linear regression model takes the following general form:

$$A_i = \sum_j c_j \times E_j$$

Where:

A_i = Trip Attractions for station i

c_j = Coefficient for independent variable j

E_j = Value of independent variable j

An ordinary least squares regression model with no intercept was estimated using R Statistical software package. Population, households, total number of employment, university enrollment, state park attractions, and tourist attractions were variables tested. Only statistically significant independent variables are included in the final model, namely total number of employment and university enrollment numbers within 10-mile radius of the train station. For each independent variable, a t-statistic value is reported to show the statistical significance of the estimated coefficient. In general, a t-value of 1.96 or greater shows significance at the 95% confidence level. A t-value of 1.64 or higher indicates significance at the 90% confidence level. For the linear regression model, two more statistics are reported above each table. The F-statistic p-value shows the significance of the linear regression model. Conventionally, a p-value of 0.05 or less means the linear model is significant. The adjusted R-squared value indicates the quality of the model. A R-squared value of 0.96 means that 96% of the variance of attractions are explained by the model, and the remaining 4% cannot be explained by the model. R-squared values closer to 1.0 are better. Table 3 shows the model and its coefficients estimated.

Table 3: Linear Regression Trip Attraction Model

Adjusted R-squared = 0.92
F-statistic p-value = 2.60E-07

Variable	Coefficient Estimate	t Value
Total Employment	0.587	7.62
University Enrollment	1.202	3.16
National Park Attraction	0.007	0.53

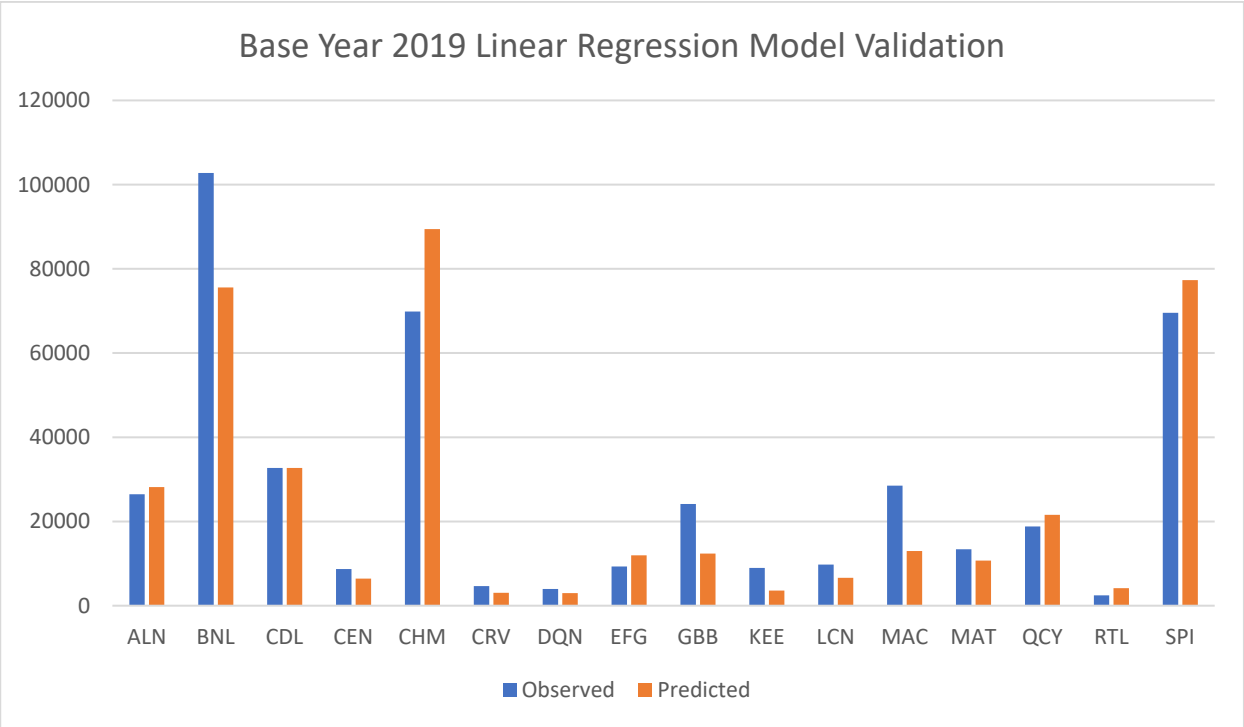


Figure 3: Linear Regression Ridership Model Validation

The regression model is widely used for trip production and attraction models. Its prediction power is limited to the attractiveness of the stations using selected independent variables. Other variables that are important for destination choice, such as accessibility and travel impedance were not considered. More variables that are important for mode choice decisions, such as travel time savings compared with driving private vehicles and cost differences between travel modes, were not captured.

3.3. Simple Ratio from Comparable Stations Weighted by Population

A simple ridership estimate developed using observed ridership from another comparable existing Amtrak station, factored using a simple ratio of population between the existing and the new stations.

Using Bloomington-Normal (BNL) as the comparable existing station, a list of population ratio was calculated for each proposed station. Ridership numbers are estimated by simply applying the population ratio as an adjustment factor on observed ridership numbers for Bloomington-Normal station.

Results from the Ratio Method serves as a simple ridership estimate benchmark. The limitation of this method is that the train ridership is assumed to be directly proportional to the regional population around the train station. No other factors were considered other than population.

4. Results

This section summarizes the ridership forecast results from each of the methods outlined in Section 3.

4.1. STOPS Model

Table 4 shows year 2019 and 2040 project ridership numbers by station for Build scenarios. Total daily boardings on proposed route are expected to be between 281 to 537 in base year 2019. Total daily boardings are expected to be between 323 to 600 in horizon year 2040.

Table 4: Daily Project Boarding by Station (Build Scenario – STOPS Model)

Station	2019 (Synthetic Mode)	2019 (Incremental Mode)	2040 (Synthetic Mode)	2040 (Incremental Mode)
Chicago	124	82	143	97
Juliet	223	148	250	170
Morris	2	2	3	4
Ottawa	37	13	41	14
Utica	90	21	97	23
Peru-LaSalle	59	15	63	15
Peoria	2	0	3	0
Total	**537**	**281**	**600**	**323**

As discussed in Section 3, the STOPS model results are limited to the small sample size captured by the underlying CTPP Journey-to-Work data for long distance trips. Especially for Peoria and Morris stations, the STOPS model likely under-estimated the trip rates or the transit mode share.

4.2. Linear Regression Model

Table 5 shows year 2019 and 2040 project ridership numbers by station for Build scenarios. Only boardings at five new stations are estimated using this method. Project boardings at two existing stations (Chicago and Juliet) cannot be estimated using this method.

Total daily boardings on proposed route are expected to be around 440 in 2019 and 490 in 2040.

Table 5: Daily Project Boarding by Station (Build Scenario – Linear Regression)

Station	2019 Daily Boardings	2040 Daily Boardings
Morris	31	44
Ottawa	36	39
Utica	98	102
Peru-LaSalle	36	40
Peoria	239	266
Total	**440**	**490**

The results from the linear regression model are only sensitive to three variables that are selected for the model: Total employment, university enrollment, and national park attractions. As discussed in Section 3, many other variables are important for destination and mode choice decisions. These variables are not captured by the linear model used in this method.

4.3. Simple Ratio by Population

Table 6 shows year 2019 and 2040 project ridership numbers by station for Build scenarios using observed boardings at the Bloomington-Normal station as the reference point. Population with 10 mile radius of each station are used in the estimation process.

Table 6: Daily Project Boarding by Station (Build Scenario – Simple Ratio Method – Reference BNL)

Station	2019 Population	2019 Daily Boardings	2040 Population	2040 Daily Boardings
Bloomington-Normal (Reference Station)	146,269	baseline	-	baseline
Morris	47,697	92	66,859	129
Ottawa	35,483	68	35,558	68
Utica	53,816	104	53,215	102
Peru-LaSalle	44,398	85	43,769	84
Peoria	246,148	474	249,457	480
Total	-	**823**	-	**864**

Ridership numbers predicted by the simple ratio method are the highest among all three methods. Reference station used in this type of method can yield significantly different results. **Table 7** shows alternative results using observed boardings at the Champaign-Urbana station as the reference point.

Table 7: Daily Project Boarding by Station (Build Scenario – Simple Ratio Method – Reference CHM)

Station	2019 Population	2019 Daily Boardings	2040 Population	2040 Daily Boardings
Champaign-Urbana **(Reference Station)**	168,744	baseline	-	baseline
Morris	47,697	54	66,859	76
Ottawa	35,483	40	35,558	40
Utica	53,816	61	53,215	60
Peru-LaSalle	44,398	50	43,769	50
Peoria	246,148	279	249,457	283
Total	-	**485**	-	**509**

4.4. Conclusion

In conclusion, given limited information and resources available for the ridership study, three methods were selected and applied to estimate ridership numbers for the proposed Peoria passenger rail service. The daily ridership for the proposed service is expected to be between 280 and 820 in 2019, and 320 to 860 in 2040.

Limitations of each selected forecasting method are discussed in Section 3. In addition, population and employment growth forecasts from the state wide travel demand model are not static. Household travel surveys and transit on-board surveys, especially for long distance travelers within the state, are the best data that can be collected to help improve future ridership forecasts.

CITY OF PEORIA

REPORT PREPARED BY:

Patrick Engineering, Inc.

SUBCONSULTANTS:

Images, Inc.

Kimley-Horn

Illinois Department of Transportation