

CITY OF NORMAN, OK CITY COUNCIL COMMUNITY PLANNING & TRANSPORTATION COMMITTEE MEETING

Municipal Building, Executive Conference Room, 201 West Gray, Norman,
OK 73069

Thursday, October 27, 2022 at 4:00 PM

AGENDA

It is the policy of the City of Norman that no person or groups of persons shall on the grounds of race, color, religion, ancestry, national origin, age, place of birth, sex, sexual orientation, gender identity or expression, familial status, marital status, including marriage to a person of the same sex, disability, retaliation, or genetic information, be excluded from participation in, be denied the benefits of, or otherwise subjected to discrimination in employment activities or in all programs, services, or activities administered by the City, its recipients, sub-recipients, and contractors. In the event of any comments, complaints, modifications, accommodations, alternative formats, and auxiliary aids and services regarding accessibility or inclusion, please contact the ADA Technician at 405-366-5424, Relay Service: 711. To better serve you, five (5) business days' advance notice is preferred.

CALL TO ORDER

AGENDA ITEMS

1. PUBLIC TRANSIT REPORT
2. PRESENTATION FROM A REPRESENTATION OF THE BICYCLE ADVISORY COMMITTEE REGARDING THEIR REVIEW OF PROTECTED BICYCLE LANES.
3. DISCUSSION REGARDING A BRIDGE MAINTENANCE BOND PROGRAM.
4. DISCUSSION REGARDING LANDLOCKED PARCELS.

ADJOURNMENT



MEMO TO: Council Community Planning and Transportation Committee

FROM: Taylor Johnson, Transit and Parking Program Manager

THROUGH: Shawn O'Leary, P.E., CFM, Director of Public Works *SO*

DATE: October 27, 2022

SUBJECT: Public Transportation Monthly Report

Purpose

The Public Transportation Monthly Report is meant to provide updates to City Council on public transit related items. In addition to the updates provided below, attached is the EMBARK Norman Performance Report for the previous month. The Performance Report provides updates on key metrics associated with the operations of the transit system.

Updates

• Go Norman Transit Plan (City of Norman Transit Long Range Plan Update)

- The Go Norman Transit Plan was approved by resolution by Council on June 22nd, 2021. Staff are continuing to move forward on the next steps as recommended in the plan. Recent work includes:
 - Staff continue to have regular meetings with the architects to finalize renovation plans for the 320 E. Comanche St property into a City Transit Center. The next step is to acquire a cost estimate for the work to be completed before bidding out the work.
 - Council approved and acknowledged the proposed the public participation process for the recommended route network by resolution on September 27, 2022. The process will consist of 2-3 public meetings where staff will glean feedback on the proposal. Finally, it will conclude with a final Council agenda item requesting review and approval to move forward with implementation.
 - Staff continue to work with partner agencies, such as EMBARK and Tyler Media, on the overall implementation plan for the recommended route network in the Go Norman Transit Plan. This includes a public participation process to finalize the route changes as mentioned above, implementing the bus stop changes, renovating the new Transit Center, marketing, and others.

• Grants

- Staff continue to program and draw down on Federal Transit Administration Grant (FTA) grants periodically to reimburse the City for eligible public transit expenses.
- Staff are working to submit an application to the annual Surface Transportation Block Grant Program – Urbanized Area (STBG-UZA) call for projects, as announced by the Association of Central Oklahoma Governments (ACOG). Staff are proposing to replace 2 CNG 35' fixed-route transit buses. Council supported the application by resolution on October 11, 2022, and the application will be submitted by the deadline of October 31, 2022.
- Staff continue to research eligible grants to support existing operations, vehicle needs, and future improvements. Staff are researching project opportunities for the various ACOG and FTA grants that will be available over the next few months.

• Fleet Maintenance & Vehicle Procurement

- City Fleet Maintenance staff continue to ensure that the transit fleet is in operational condition each morning for line up, despite the age of the vehicles that the City inherited.
 - The City's Transit Fleet includes 27 revenue vehicles, 13 in the fixed-route fleet and 14 in the paratransit fleet. Unfortunately, 21 out of 27 of the revenue vehicles used in the City's transit fleet have met their useful life and are eligible to be retired according to FTA requirements. Two additional vehicles will reach the end of their useful life by the end of 2022, and a third will do so in 2023.
- The City is currently in the process of purchasing 2 battery electric busses and staff anticipates receiving these vehicles in October 2022. Below is background information on both battery electric bus projects:
 - An authorization to purchase the City's first battery electric vehicle, a transit bus, was approved at Council's May 25, 2021 meeting. A purchase order was issued on May 27, 2021 to the manufacturer. Approximately 50% of the vehicle purchase price will be reimbursed through a grant received from Oklahoma Department of Environmental Quality through the Volkswagen Settlement Fund.

office memorandum

- An authorization to purchase the City's second battery electric transit bus was approved at Council's August 10, 2021 meeting. A purchase order was issued on August 13, 2021 to the manufacturer. Approximately 70% of the vehicle purchase price will be reimbursed through a grant received from the FTA's FY21 Low- or No-Emission Vehicle Program. The City's project was 1 of 49 projects selected in the nation.
- Council granted approval for additional funds to be allocated to both bus builds on December 14, 2021. These additional funds were used to add charge rails to the top of the busses so that in the future an overhead pantograph charging system could be utilized.
- Staff visited the bus manufacturer's facility between September 13-16, 2022 in order to inspect the buses as the manufacturing process was mostly complete. Unfortunately, there have been some part delays for these 2 buses which will prolong their delivery. Once fully complete, the manufacturer, Gillig, will perform tests before the buses are delivered.
- The City is currently in the process of purchasing 5 paratransit vans and staff anticipates receiving these vehicles in January-February 2023. Below is background on this purchase:
 - On December 14, 2021 the City Council passed and adopted resolution R-2122-72 transferring \$346,703 from the Capital Fund Balance to be matched with \$122,812 available in the Public Transit and Parking Fund to be used to replace 5 paratransit vehicles in the Transit Fleet for a total of \$469,515. Due to ongoing supply chain issues the price of the vehicles had increased, however staff were able to identify additional FTA grant funding allocated to Norman to supplement the cost increase and decrease the amount of local match that was provided from the Public Transit and Parking Fund. Resolution R-2122-98 was approved by Council on March 8 transferring an additional \$149,454 (for a total cost of \$584,655) to cover the cost increase. FTA grant OK-2020-026 will be amended to \$496,157 leaving a local match of \$88,508 (a reduction in the local matching funds of \$34,304.)
- The City is currently in the process of purchasing 5 CNG 35' fixed route buses and staff anticipates receiving these vehicles in October 2023-January 2024. Below is background information on this purchase:
 - Utilizing transit 5339 funds allocated from FY21 (grant number OK-2020-026), 1 35' CNG bus will be purchased. These were funds allocated to the Norman urbanized area by formula. In addition, on June 14, 2022 the City Council approved a contract with the Oklahoma Department of Transportation (ODOT) accept Surface Transportation Block Grant – Urbanized Area (STBG-UZA) funding for the purchase of 2 35' low-floor CNG transit buses. An Authorization to Purchase for these 3 buses was approved by Council on August 23, 2022. A purchase order was issued on September 14, 2022 to the manufacturer.
 - Utilizing funds received from the FY22 FTA Low- or No-Emissions Vehicle Program, staff proposed to purchase 2 additional CNG 35' fixed route buses. Council approved a resolution accepting the grant and an authorization to purchase the buses on September 27, 2022. The purchase order for 2 buses was issued September 29, 2022.

- Regional Transportation Authority (RTA) Update

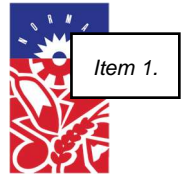
- Council approved an amended RTA Trust Indenture on September 13, 2022 due to Midwest City, Del City, and Moore withdrawing from the RTA. Each remaining member City (Edmond, Oklahoma City, and Norman) will gain an additional RTA Board seat with the changes. On September 27, 2022 Council approved a resolution appointing Mr. Chuck Thompson as the additional Norman RTA Board Director.

Conclusion

Thank you for your review of these updates and attached monthly performance report. Staff are available to answer any questions.

Attached: EMBARK Norman Performance Report for September 2022

office memorandum



PERFORMANCE REPORT

Transit System Report

September 2022

Purpose

The Transit System Report provides a summary of both internal indicators and performance measures used to evaluate the performance of the EMBARK transportation system for the City of Norman. The internal indicators are mainly used by staff to compare performance to previous periods whereas, the performance measures having

specific targets are more outcome-based and are included in EMBARK's strategic business plan to help demonstrate accomplishments given the resources that are provided. The internal indicators and performance measures included in this report address ridership, dependability, safety and align with EMBARK's mission.

Total Ridership

Total ridership for EMBARK Norman in September 2022 was 23,948 compared to 23,280 in September 2021. The average total daily ridership was 958 for September 2022, a 2.90% increase from 931 in September 2021. Fiscal-year-to-date ridership is 69,085 passengers, a 4.86% increase from the September 2021 YTD total of 65,880.

The fixed-route service totaled 21,897 for September 2022 compared to 21,584 for September 2021.

Average fixed-route daily ridership for September 2022 was 876, compared to 863 for September 2021, a 1.51% increase. Passengers with bicycles or similar means of travel totaled 861, compared to 762 for September 2021. Passengers with wheelchairs or other mobility devices totaled 332, compared to 438 for September 2021.

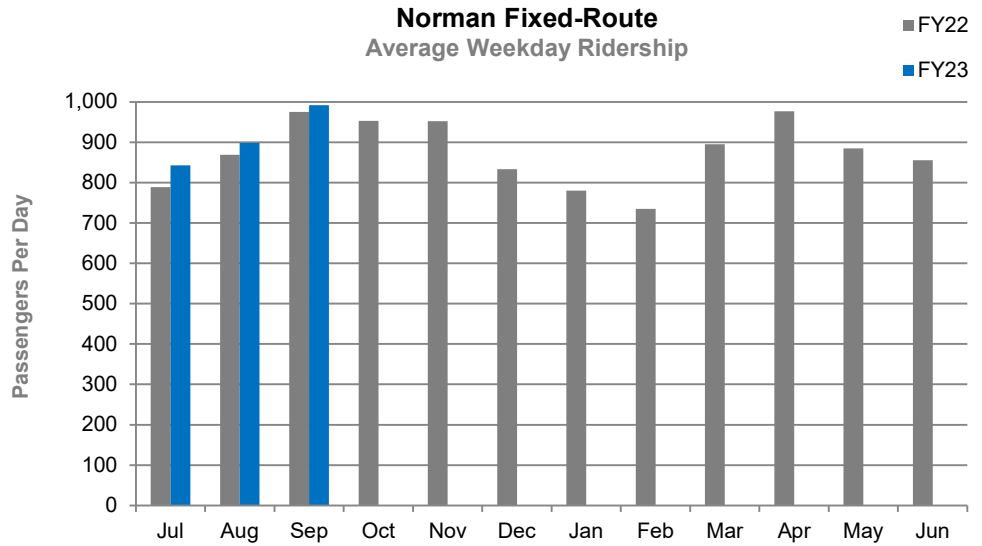
PLUS ridership totaled 2,051 for September 2022, compared to 1,696 for September 2021. The average total PLUS ridership was 82 for September 2022 and 68 for September 2021, a 20.59% increase.

Passengers with wheelchairs or other mobility devices totaled 388 for September 2022, compared to 335 for September 2021, a 15.82% increase.

Norman Transit Services	Sep FY23	Sep FY22	+/- Sep FY22
Fixed Routes (M-F)	20,817	20,471	1.69%
110 - Main Street	3,842	3,717	3.36%
111 - Lindsey East	10,452	9,794	6.72%
112 - Lindsey West	2,798	2,820	-0.78%
120 - West Norman	221	146	51.37%
121 - Alameda	3,498	3,994	-12.42%
144 - Social Security	6	N/A	N/A
Fixed Routes (Sat)	1,080	1,113	-2.96%
110 - Main Street	205	238	-13.87%
111 - Lindsey East	388	370	4.86%
112 - Lindsey West	169	180	-6.11%
121 - Alameda	318	325	-2.15%
PLUS ADA Service	2,051	1,696	20.93%
PLUS (M-F)	1,970	1,656	18.96%
PLUS (Sat)	81	40	102.50%
Bikes	861	762	12.99%
Wheelchair	332	438	-24.20%
PLUS Wheelchair	388	335	15.82%

Fixed Route Weekday Ridership

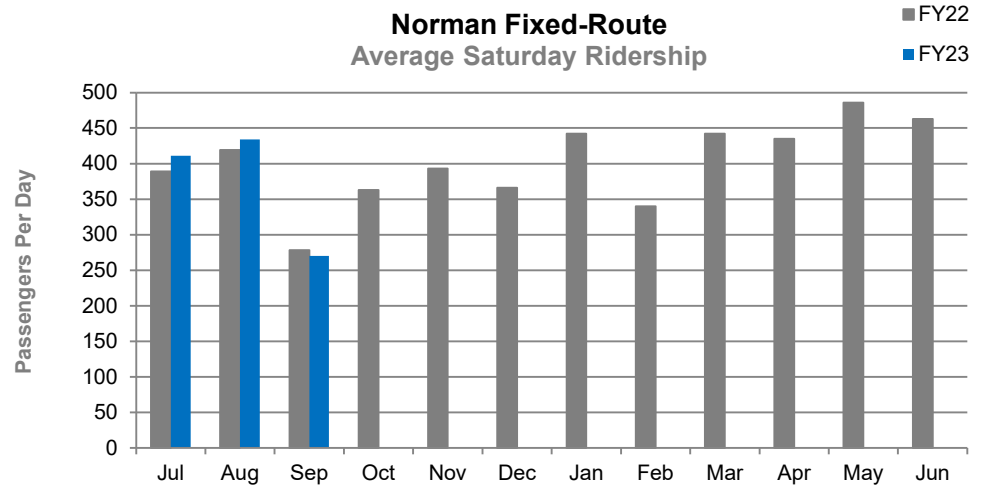
Total fixed-route weekday ridership for September 2022 was 20,817, a 1.69% increase from 20,471 in September 2021. Average weekday passenger ridership totaled 992 in September 2022; a 1.74% increase compared to 975 for September 2021. The average RPSH was 14.52.



Fixed Route Saturday Ridership

Total fixed-route Saturday ridership for September 2022 was 1,080, a 2.96% decrease from 1,113 in September 2021. Average weekend passenger ridership totaled 270 for September 2022, a 2.88% decrease from 278 in September 2021. The average RPSH was 7.94.

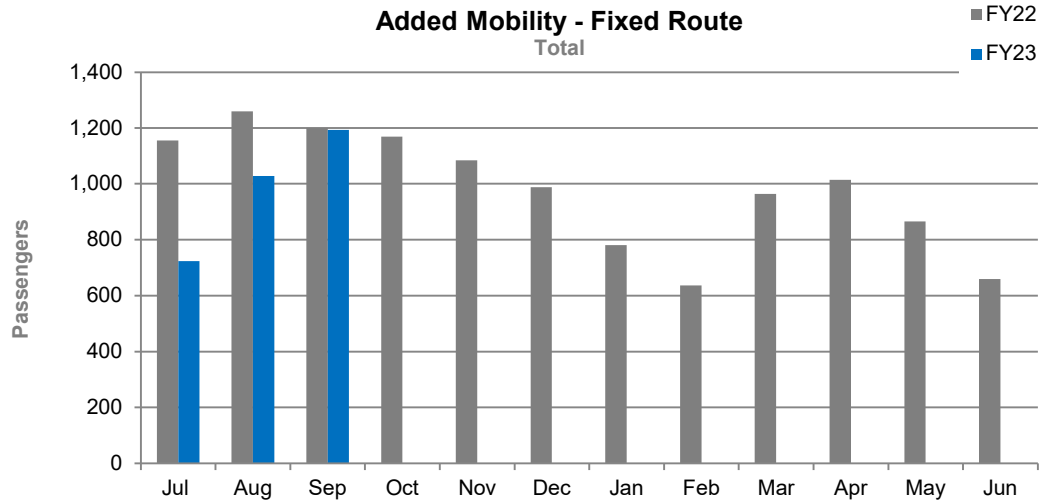
The University of Oklahoma hosted three football games on Saturdays in the month of September (9/3, 9/10, and 9/24).



Added Mobility – Fixed Route

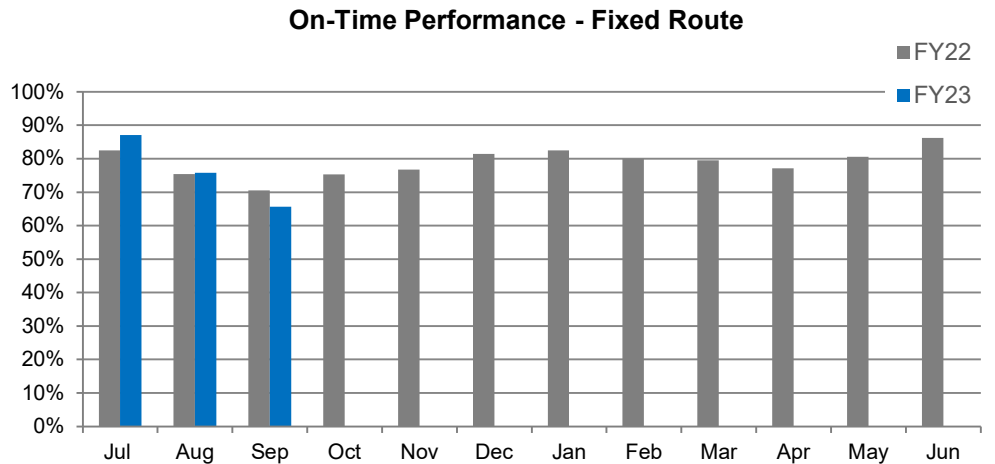
Total passengers with added mobility, such as bikes and wheelchairs, totaled 1,193 for September 2022, a 0.58% decrease from 1,200 in September 2021.

Bike passengers totaled 861, a 12.99% increase from 762 in September 2021. Wheelchair passengers totaled 332, an 24.20% decrease from 438 in September 2021.



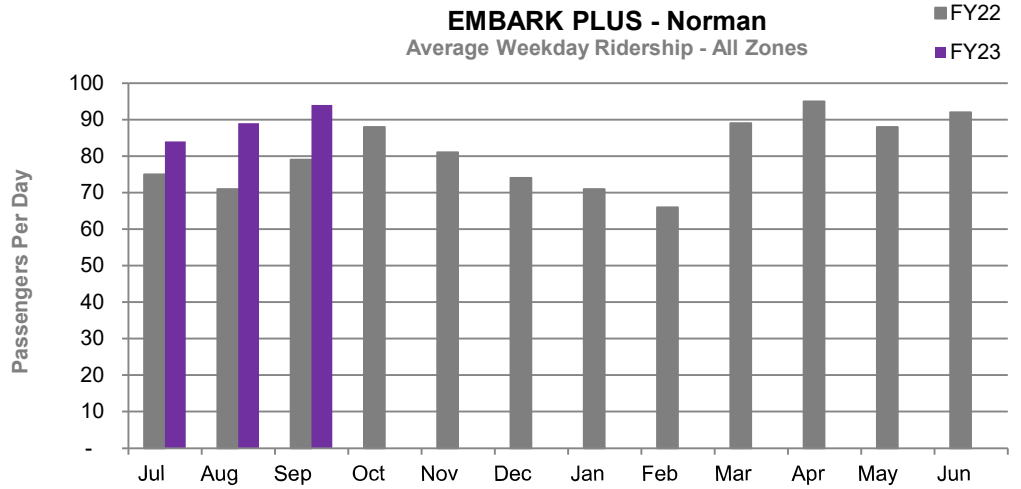
On-Time Performance – Fixed Route

Cumulative on-time performance for fixed-route buses was 65.70% in September 2022, a 4.80% decrease from 70.50% in September 2021.



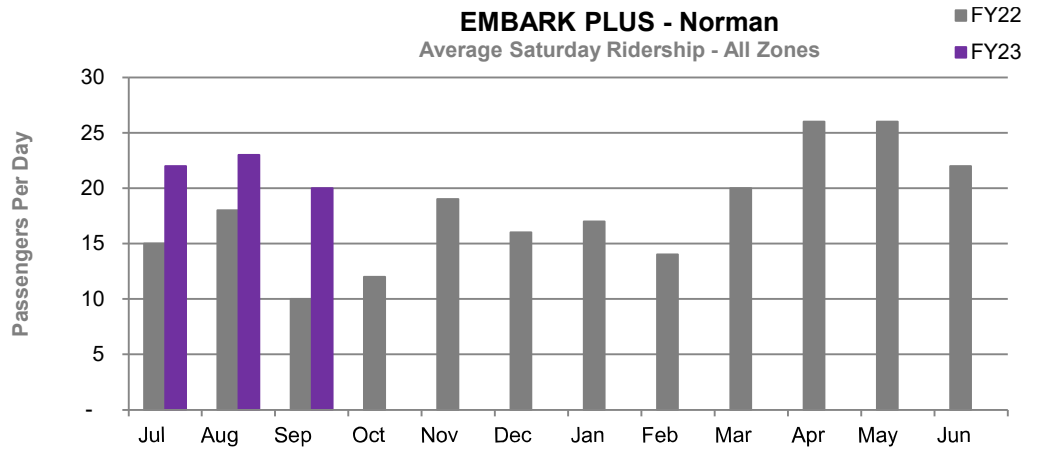
PLUS Weekday

Total PLUS weekday ridership for September 2022 was 1,970, an 18.96% increase from 1,656 in September 2021. Average weekday passenger ridership totaled 94 for September 2022, an 18.99% increase from 79 for September 2021. RPSH was 1.30.



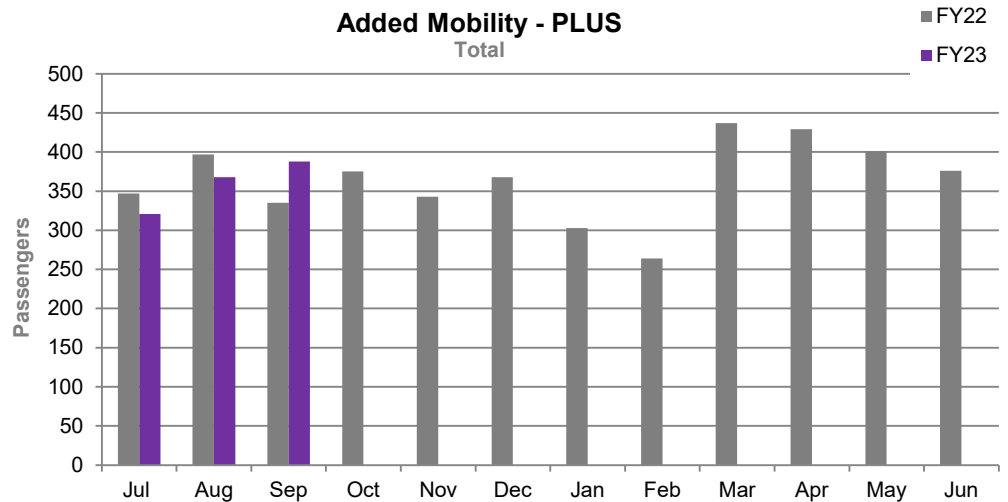
PLUS Saturday

Total PLUS Saturday ridership for September 2022 was 81, a 102.50% increase from 40 in September 2021. Average Saturday passenger ridership totaled 20 for September 2022, a 100% increase from 10 in September 2021. RPSH was 1.31.



Added Mobility - PLUS

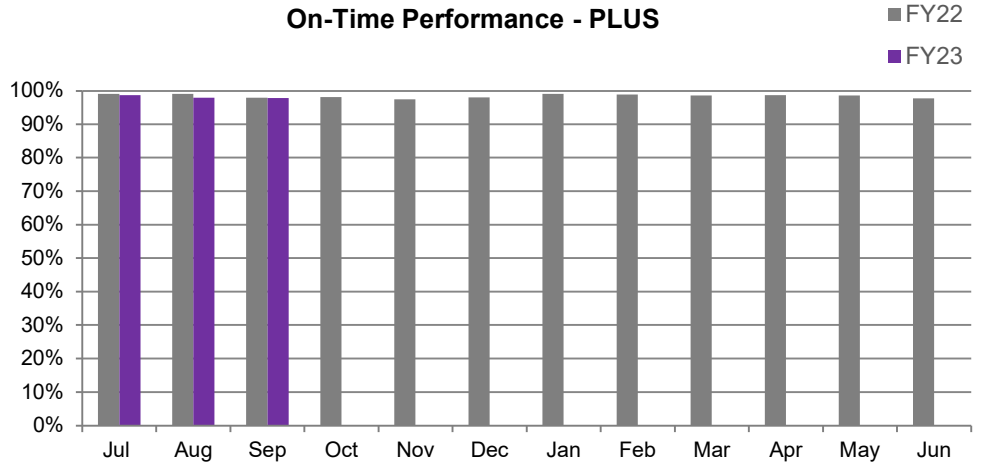
PLUS passengers with added mobility totaled 388 for September 2022, a 15.82% increase from 335 in September 2021.



On-Time Performance - PLUS

Cumulative on-time performance for PLUS buses was 97.82%, a 0.11% decrease from 97.94% in September 2021.

Weekday on-time performance in the primary zone was 97.92%, a 0.17% decrease from 98.09% in September 2021. Weekday on-time performance in the secondary zone was 97.52%, a 0.06% increase from 97.46% in September 2021. Saturday on-time performance was 97.40%, the same as September 2021.



PLUS Weekday Service Summary	Sep FY23	Sep FY22	+/- Sep FY22		PLUS Saturday Service Summary	Sep FY23	Sep FY22	+/- Sep FY22
Total Passengers	1,970	1,656	18.96%		Total Passengers	81	40	102.50%
Total Trips	1,900	1,561	21.72%		Total Trips	77	39	97.44%
Trips Daily Average	90	79	13.92%		Trips Daily Average	19	10	92.50%
Trips Requested	1,900	1,561	21.72%		Trips Requested	77	39	97.44%
Denied Trips	0	0	0.00%		Denied Trips	0	0	0.00%
Capacity Denials	0	0	0.00%		Capacity Denials	0	0	0.00%
No Show	38	22	72.73%		No Show	2	1	100.00%

PLUS Applications	Sep FY23	Sep FY22	+/- Sep FY22
New Applications	15	17	-11.76%
Renewals Received	13	4	225.00%
Applications Approved	20	10	100.00%
Applications Denied	1	1	0.00%

Summary of Services Table: September 2022

The table below provides daily averages for the number of passengers carried by many of the services offered by EMBARK Norman. The year-to-date (YTD) figures are cumulative totals.

EMBARK Norman Service Summary	ADP Sep FY23	FY23 YTD	FY22 YTD	Service Profile	Sep FY23	Sep FY22
Fixed Routes (M-F)	992	58,222	56,158	Weekdays	21	22
Fixed Routes (Sat)	270	4,872	4,735	Saturdays	4	4
PLUS (M-F)	94	5,710	4,801	Gamedays	3	4
-Zone 1*	77	4,764	3,821	Holidays	1	1
-Zone 2**	17	946	980	Weather	0	0
PLUS (Sat)***	20	281	186	Fiscal YTD Days	77	77
				Cal. YTD Days	229	230

*Requires 3/4 mile

**Operates only on Weekdays until 7:00 pm

***Operates only in Zone 1

Strategic Performance Measures

MEASURE	FY 23 YTD	FY 23 Targets	
# of Norman fixed-route passenger trips provided	63,094	251,881	●
# of Norman paratransit trips provided	5,991	21,000	●
% of on-time Norman paratransit pick-ups	98.11%	98.58%	■
# of Norman bus passengers per service hour, cumulative	13.05	13.04	●
# of Norman bus passengers per day, average	821	800*	●
% of Norman required paratransit pick-ups denied due to capacity	0.02%	0.00%*	●
% of on-time fixed-route arrivals	76.20%	80.94%	●

*These targets are not being tracked in LFR but can be found in the KPI spreadsheet.

Glossary

- **Added Mobility** – Wheelchairs, bicycles, scooters, and other devices used by passengers in conjunction with transit
- **ADP** – Average Daily Passengers
- **ADR** – Average Daily Ridership
- **AVG** – Average
- **Fixed Route** – Regular bus service
- **FY22** – The fiscal year 2022. Lasted from 7/1/2021 to 6/30/2022
- **FY23** – The fiscal year 2032. Lasting from 7/1/2022 to 6/30/2023
- **FY YTD** – Fiscal Year, Year to Date
- **KPI** – Spreadsheet used to record and compare all data used in the monthly report
- **LFR** – "Leading for Results," EMBARK's internal performance measurements and targets
- **OTP** – On-time performance
- **Paratransit** – ADA vehicle service for seniors and other clients with special needs
- **PAX** – Passenger
- **PLUS** – Brand name for EMBARK Paratransit service
- **RPSH** – Riders per service hour
- **SAT** – Saturday
- **WKD** – Weekday
- **YOY** – Year-over-year, used to compare the previous year's performance when available
- **ZONE 1** – Primary zone for PLUS operation
- **ZONE 2** – Secondary zone for PLUS operation

Bicycle Advisory Committee Review of Protected Bicycle Lanes



Community Planning & Transportation
Committee

October 27, 2022



CPTC Asks BAC to Review Protected Bicycle Lanes

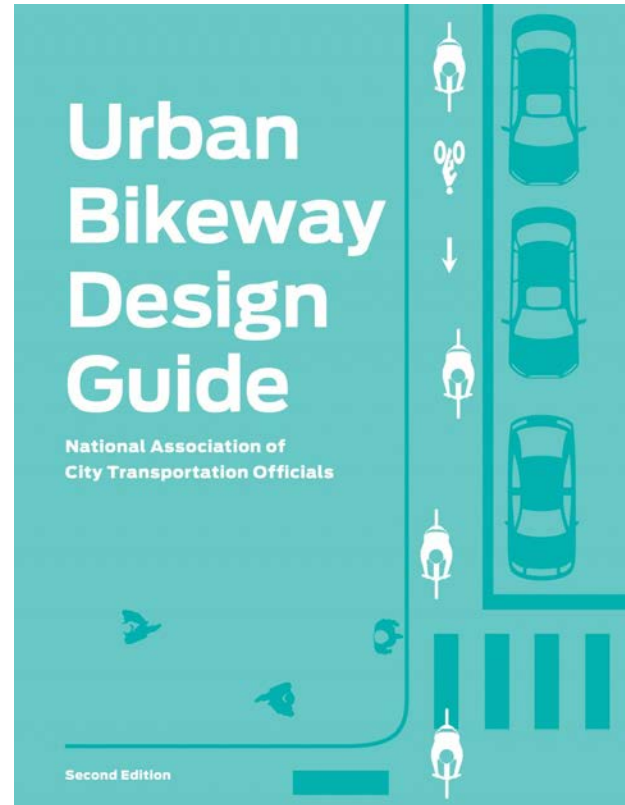
- This topic evolved from two different perspectives
- First, the widening of 12th Avenue SE between State Highway 9 and Cedar Lane Road creates some new challenges for bike and vehicle users crossing paths in ways not seen previously in Norman prompting the question whether Norman is ready for protected bike lanes
- Second, the concept of protected bike lanes is gaining popularity in certain parts of the country

CPTC Asks BAC to Review Protected Bicycle Lanes

- September 24, 2020, CPTC Meeting
- Norman currently has only one protected bike lane on West Rock Creek Road—concept is gaining in popularity in progressive urban settings
- Staff liaisons to the BAC were instructed to have the BAC review bicycle lanes throughout Norman looking at further protections that may be provided other than a painted line
- Presentation update at September 23, 2021, CPTC Meeting

Agenda for Standards Development

- Research methodology
- Types of protected bicycle lanes
- Signed routes
- Signed and marked routes
- Protected routes



Bicycling in Norman

- BAC collected opinions from the Norman cycling community regarding the perceptions and opinions of different types of lanes
- The general feeling and trend is towards bike lanes that somewhat protect the rider
- This can involve a buffer as in space between traffic and cyclists or a physical barrier

Bicycling in Norman (Continued)

- Lanes that are separated by flexible barriers feel less safe to riders if the bike lane does not provide adequate width
- Double lining does enhance the feel of separation and safety
- There are situations and certain locations where the flexible and non-flexible barriers and additional lane delineation through limited use of green paint can increase cyclist safety (examples will follow)

Bicycling in Norman (Continued)

Item 2.

- The BAC believes that the majority of bicycle lanes in Norman can and should be Designated Lanes with White Lines, White 3D Lines or Double Lines with hashed stripes if the setting allows and that the use of solid green bike lanes should be discontinued
- All lane designations would include signage and bicycle silhouettes on pavement
- City bicycle routes can continue to be designated by signage

Recommendations

- The determination of the exact type of bicycle lane to recommend for a specific stretch of street or roadway will be done on a case by case basis
- Future decisions should be based on Adopted Standards, the current NORMAN Land Use and Transportation Plan, the pending update to the Engineering Design Criteria, Norman Street Traffic volumes, and records of vehicular-bicycle collisions

Signed Routes



Signed and Striped On-Street Routes

Item 2.



Left: Shared,
signed route with
Sharrows

Right: Separate
green lane with
white line and signs



Signed and Striped On-Street Routes



Above: Shared White Line route, signed, with Bicycle Symbols

Protected Bicycle Lanes

Right: Separate with
Double and Hashed
White Line and signs



Multimodal Paths (Off Street)



Left and Right:
Examples of
multimodal paths
in Norman



Protected Bicycle Lane with 3D Stripe



3-D Lane Stripe – Conceptual – not currently in place but could have potential to provide additional perceptual separation for bike lane. Stripe would be normal white line with same size or half width black line on traffic side of bike lane

Protected Bicycle Lanes in the Region



Other types of Lanes currently in use in Regional Area. Separate Green Lane at intersections with White Line - Some intersections have Flexible Barriers as well.

Protected Bicycle Lanes in the Region



Other types of Lanes currently in use in Regional Area. Separate Lane with Flexible Barriers, Limited Green Marking, and Double Striping.

One More Protected Bicycle Lane Example

Right: Separate Lane protected by hard barrier – Not currently used in this area – example from internet



Recommendations

- **Designated Lanes**
 - Separate with Double Striping
 - Separate with White 3-D Line
 - Separate with White Line
- **Designated Lanes in area with increased motor vehicle – bicycle conflict**
 - Separate with Double White Line
- **Designated Lanes in area with increased motor vehicle – bicycle conflict at intersections**
 - Separate with White Line and Green Surface Coating and barriers

Recommendations

- **Designated Lanes in area with high motor vehicle – bicycle conflict**
 - Separate with White Line and Green Surface through conflict zone and barriers for most likely area of conflict
- **Signs Only for low traffic volume Designated Bicycle Routes**
 - Bicycle Routes designated by the City on many residential streets as well as section line roads will continue to be appropriate

Next Steps

- Gain acceptance of BAC recommendations from CPTC
- Attach BAC bicycle lane recommendations to the nearly complete update to the City's Engineering Design Criteria

QUESTIONS?



City of Norman

Proposed Bridge Maintenance Bond Program

Community
Planning &
Transportation
Committee

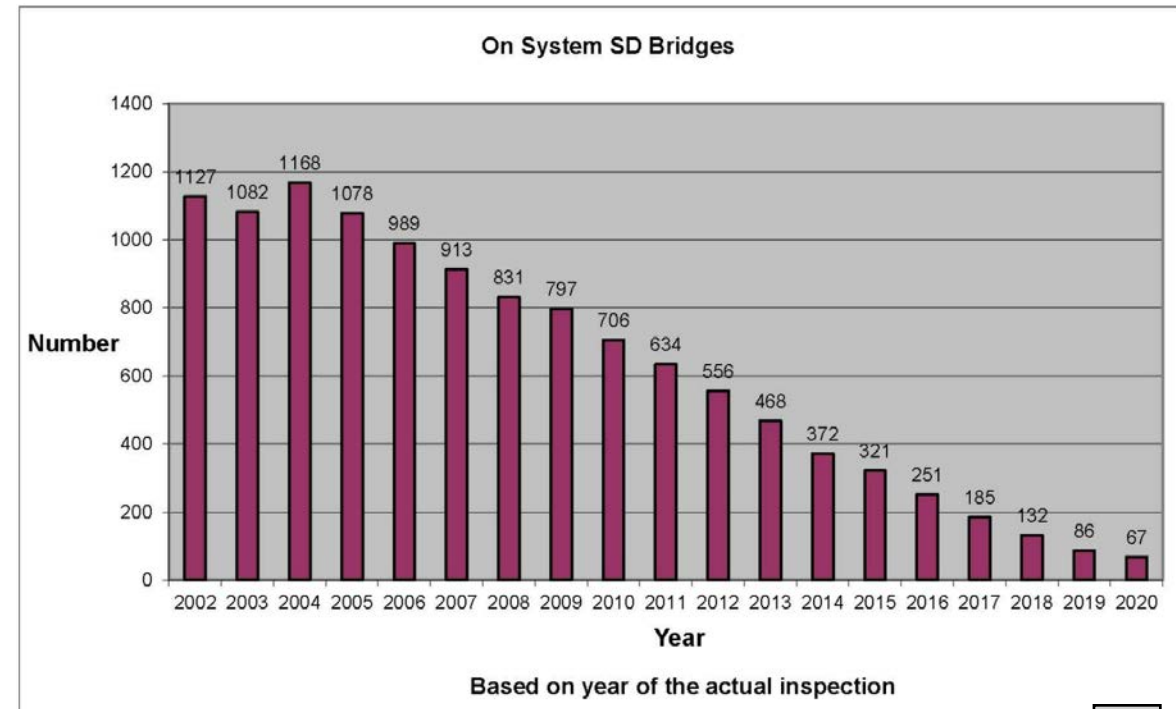
Thursday,
October 27,
2022



Oklahoma State History

- In 2004, Oklahoma was ranked 49th nationally for on-system bridge conditions
- As of April 2021, Oklahoma was ranked 7th nationally for on-system bridge conditions

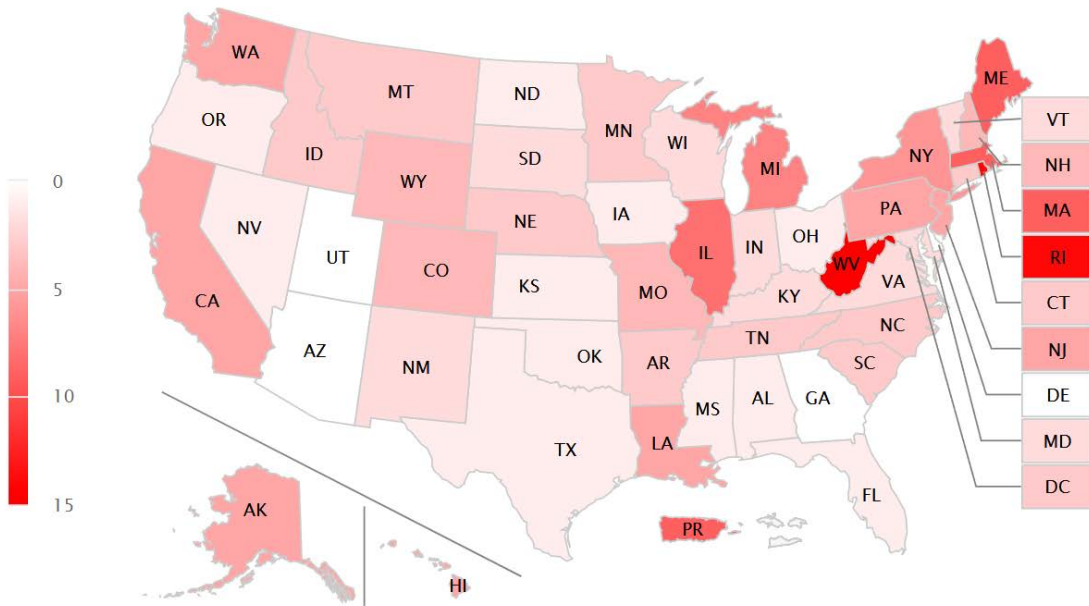
2021				
State	Total No. of Bridges	No. of Bridges Rated Poor	% of Bridges Rated Poor	State Ranking
Georgia	6808	23	0.34%	1
Arizona	4844	32	0.66%	2
Iowa	4152	30	0.72%	3
Kansas	5095	37	0.73%	4
Texas	34863	256	0.73%	5
Utah	1846	14	0.76%	6
Oklahoma	6737	67	0.99%	7
Nevada	1155	12	1.04%	8
Florida	5703	64	1.12%	9
Maryland	2554	29	1.14%	10



Oklahoma State History

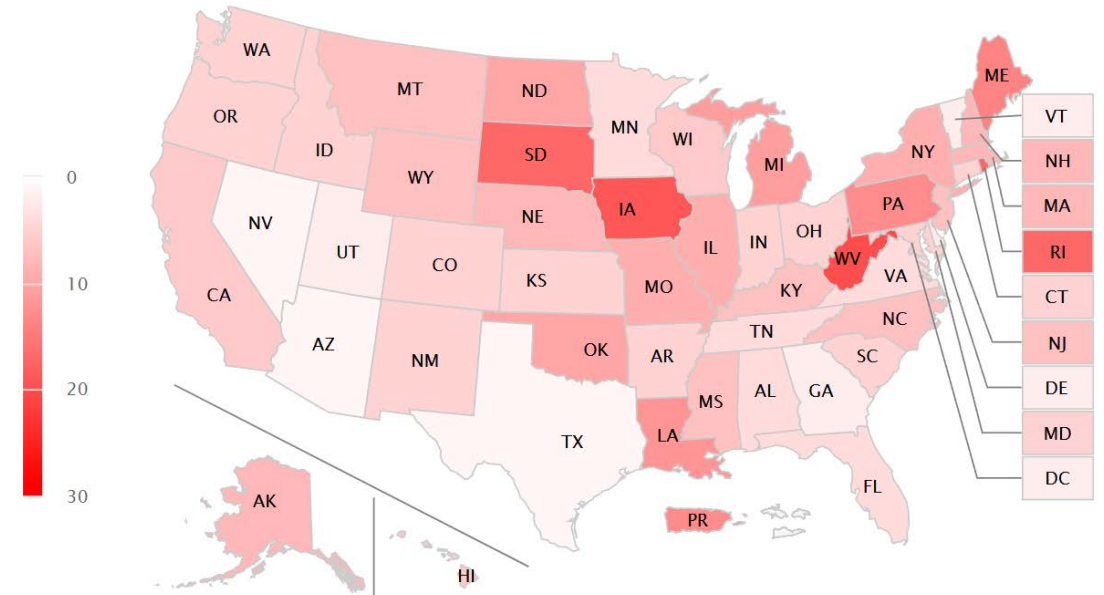
On-System Bridges

As of 2021, Oklahoma's rank for on-system bridges in "poor" condition is **7th** in the nation



Off-System Bridges

As of 2021, Oklahoma's rank for off-system bridges in "poor" condition is **40th** in the nation



History of Norman Bridge Maintenance Program

- The FHWA requires that all off-system bridges be inspected biennially
- HW Lochner has been selected to perform these inspections for the last 3 cycles
- Council adopted first dedicated annual budget for Bridge Maintenance in FYE '18
- Original allocation of \$100,000.00 annually
- Current FYE '23 adopted budget of \$750,000.00
- Total adopted since start of program \$2,050,000.00

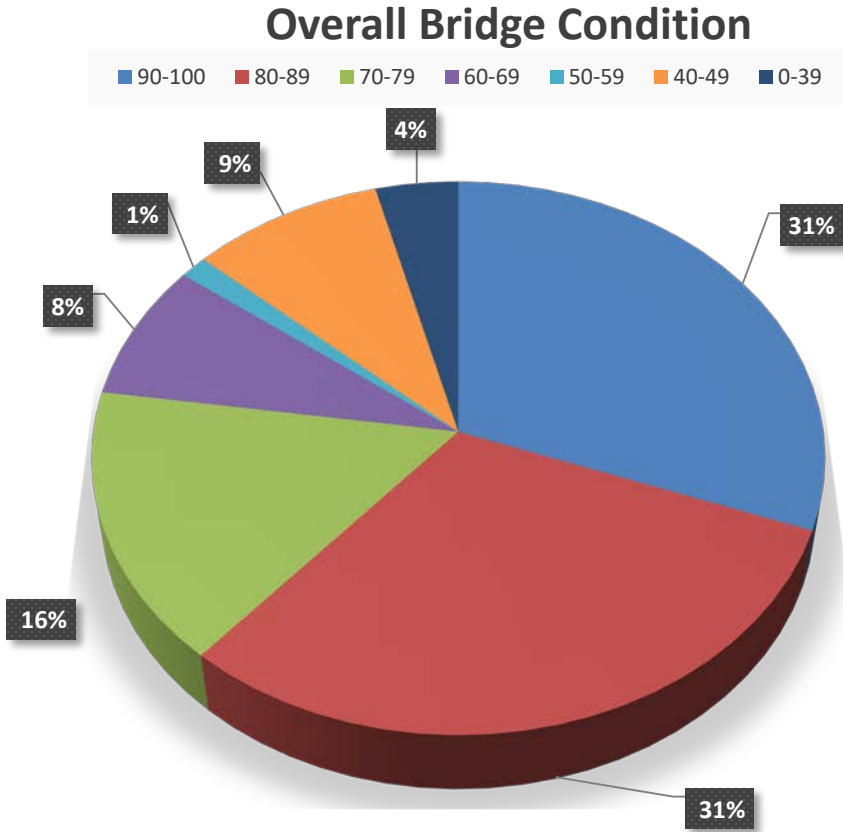


Porter Ave Bridge over Little River (located north of Tecumseh Rd).

Built in 1937.

This Bridge is rated Functionally Obsolete due to its narrow deck width.

Norman History Continued



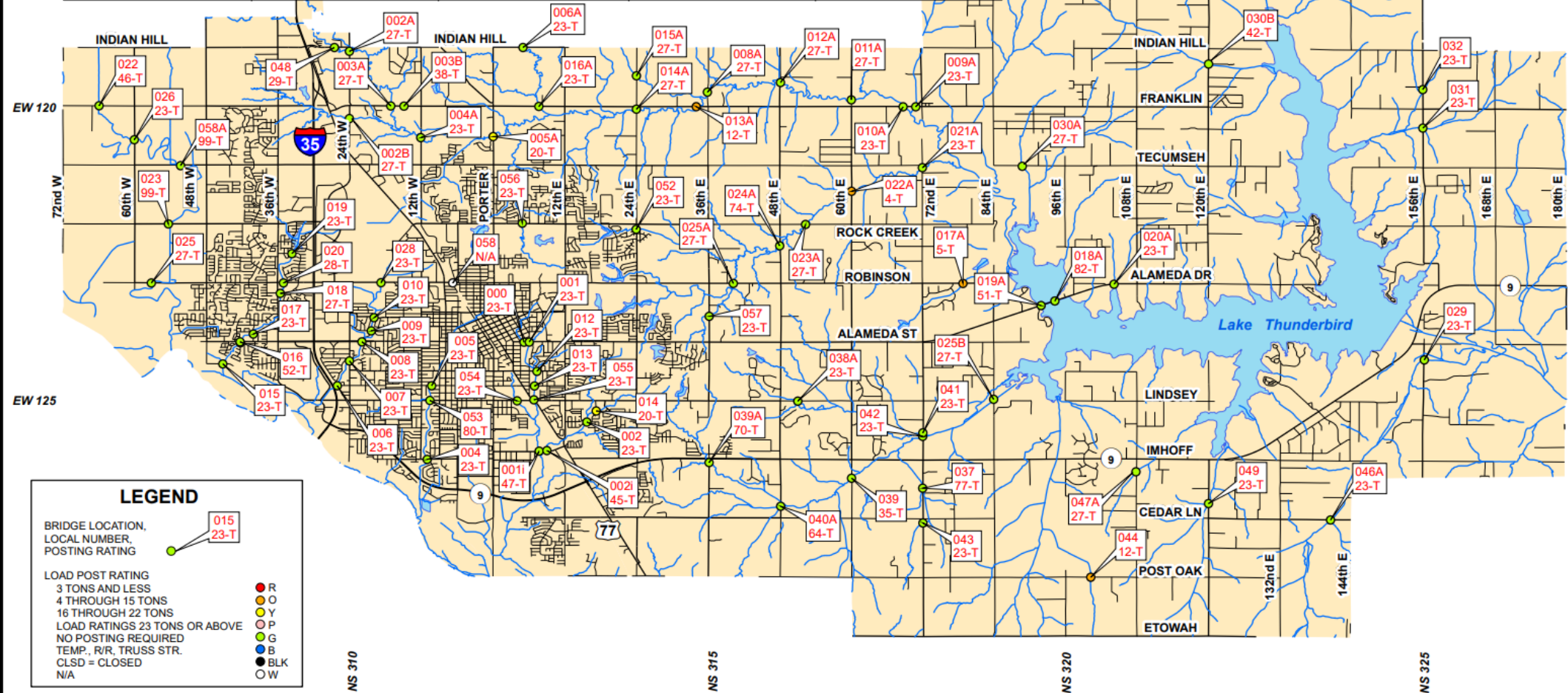
- 80 Nationally registered bridges within the City of Norman
- 2017 inspection cycle identified 18 structurally deficient bridges (poor rating)
- 2021 inspection cycle identified 5 structurally deficient bridges with 15 bridges being at risk of becoming structurally deficient

BRIDGE LOCATION INFORMATION

LOCAL NO.	NBI NO.	DEFICIENCY STATUS	LOCAL NO.	NBI NO.	DEFICIENCY STATUS	LOCAL NO.	NBI NO.	DEFICIENCY STATUS	LOCAL NO.	NBI NO.	DEFICIENCY STATUS	LOCAL NO.	NBI NO.	DEFICIENCY STATUS
000	25114	ND	008	18911	ND	016A	20609	AR	025A	07921	ND	042	19913	FO/AR
001	25115	ND	008A	22642	ND	017	19584	ND	025B	21945	ND	043	10884	ND
001i	25220	ND	009	24966	ND	017A	05850	SD	026	30152	ND	044	26914	FO/AR
002	26906	FO	009A	19288	AR	018	20182	ND	028	09865	ND	046A	20034	FO
002A	22300	ND	010	10801	ND	018A	22039	ND	029	21494	ND	047A	33052	ND
002B	33049	ND	010A	19348	AR	019	20084	ND	030A	33050	ND	048	23373	ND
002i	25221	ND	011A	22313	ND	019A	22080	ND	030B	33051	ND	049	32952	ND
003A	31194	ND	012	12330	AR	020	19451	ND	031	10269	ND	052	18802	FO
003B	31195	ND	012A	20794	ND	020A	09930	AR	032	07546	FO/AR	053	31231	ND
004	18958	SD	013	12331	ND	021A	06106	FO/AR	036	07175	ND	054	19298	AR
004A	26488	ND	013A	9991	FO/AR	022	07896	ND	037	21455	AR	055	12549	FO/AR
005	12203	ND	014	20394	ND	022A	09189	SD	038A	07923	FO	056	28743	ND
005A	05274	FO/AR	014A	22628	ND	023	09863	ND	039	20167	ND	057	28824	ND
006	12282	FO	015	14930	SD	023A	06203	ND	039A	30396	ND	058	29596	ND
006A	19418	SD	015A	00167	ND	024A	26487	ND	040A	05645	ND	058A	24898	ND
007	08335	ND	016	31728	ND	025	20663	ND	041	20014	AR			

BRIDGE LOCATION INFORMATION LEGEND

ND - NON-DEFICIENT
 AR - AT RISK OF BECOMING SD
 FO - FUNCTIONALLY OBSOLETE
 SD - STRUCTURALLY DEFICIENT



Why is this a problem now?

- 3 Bridge failures resulting in serious safety hazards and closure since 2016.
 - Havenbrook Street Bridge-September 2016 (Ward 3)
 - Main Street Bridge- August 2018 (Ward 3)
 - Imhoff Road Bridge- July 2021 (Wards 2/4)



HavenBrook Bridge Failure – September 26, 2016



Main Street Bridge over Brookhaven Creek – August 14, 2018.



Imhoff Road Bridge over Imhoff Creek – July 29, 2021



Aging Infrastructure Limits Mobility

APPROXIMATE VEHICLE WEIGHTS



AVERAGE STANDARD CAR - 1.5 TONS



AVERAGE FIRE TRUCK
19 TONS - 30 TONS

AVERAGE STANDARD TRUCK - 3 TONS



AVERAGE LOADED GARBAGE TRUCK - 25 TONS



AVERAGE AMBULANCE - 5 TONS



AVERAGE LOADED PLOW TRUCK - 28 TONS

AVERAGE DELIVERY TRUCK - 6 TONS



AVERAGE LOADED CEMENT TRUCK - 33 TONS



AVERAGE LOADED SCHOOL BUS - 17 TONS



AVERAGE LOADED DUMP TRUCK - 36 TONS

AVERAGE LOADED CHARTER BUS - 20 TONS



AVERAGE LOADED TRACTOR TRAILER - 40 TONS





60th Ave NE Bridge over Rock Creek (located north of Rock Creek Rd).

Built in 1940.

This Bridge is rated Structurally Deficient and Load Posted for 4 Tons.





*E. Robinson Street Bridge
(located east of 72nd Ave NE).*

Built in 1938.

*This Bridge is rated
Structurally Deficient and
Load Posted for 5 Tons.*





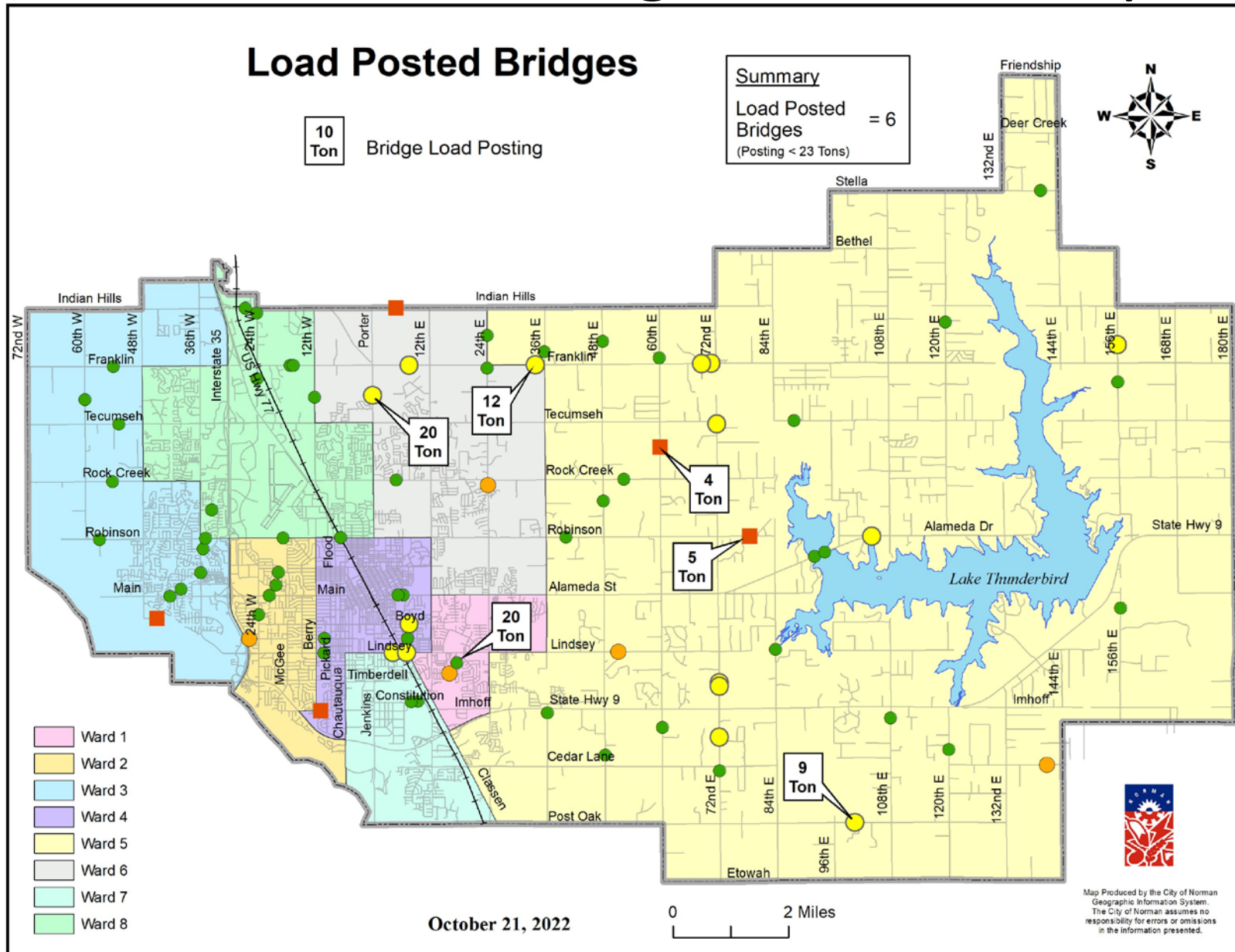
*Franklin Rd Bridge over the Little River
(located west of 36th Ave NE).*

Built in 1942.

This Bridge is Load Posted for 12 Tons.



Load Posted Bridge Location Map



Bridge Bond Discovery Report

Item 3.

- Staff compiled the data from the bridge inspection reports to generate a rank-ordered list consisting of the City's highest priority locations
- Staff contracted with HW Lochner to review the rank-ordered list and generate replacement and/or rehabilitation cost estimates for each location
- Using the Discovery Report, Staff began investigations related to possible funding opportunities

LOCHNER

City of Norman Bridge Bond Discovery



Submitted by: H.W. Lochner, Inc.
April 28, 2022

Proposed Bridge Maintenance Bond Program

- Bridge Replacement
 - 10 Locations Identified
- Major Bridge Rehabilitation and Maintenance
 - 9 Locations Identified



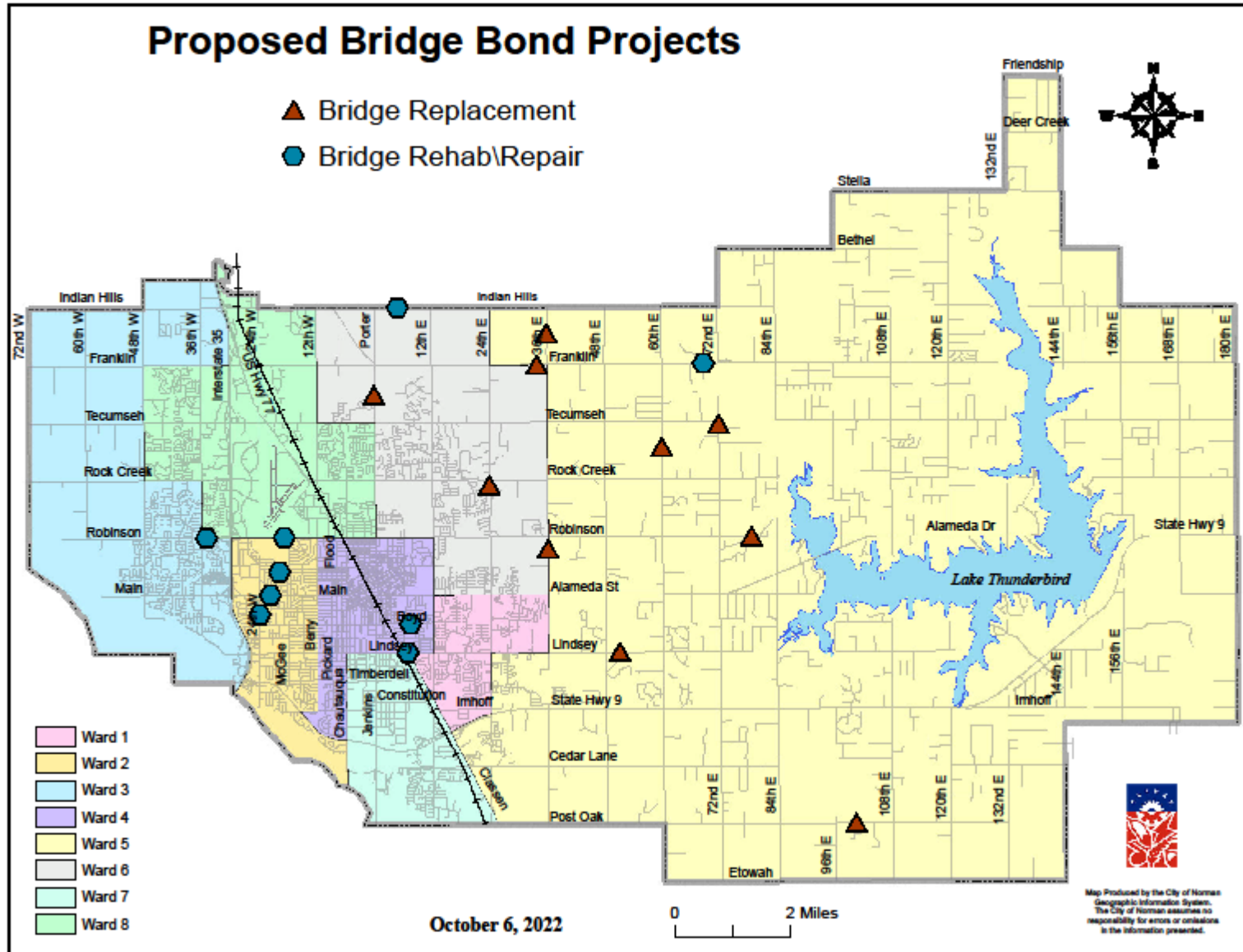
Bridge Replacement – Main Street Bridge over Brookhaven Creek – 2018.
\$4,905,000.00

10 Year, \$45 Million Program	
Home Value	Monthly Property Tax Increase
\$100,000	\$4.54
\$150,000	\$7.01
\$200,000	\$9.49



Bridge Rehabilitation– Imhoff Road Bridge emergency repairs – 2020
\$1,945,803.59

Proposed Bridge Bond Locations



REPLACE [Ward]	MAJOR REPAIR [Ward]
60 TH Ave NE [5]	Indian Hills Rd [6]
N. Porter Ave [6]	Franklin Rd [5]
E. Robinson [5]	24 th Ave SW [2]
72 nd Ave NE [5]	W. Robinson [3/8]
Lindsey St. [5]	Lindsey St. [1/4/7]
24 th Ave NE [6]	Boyd St. [4]
36 th Ave NE [5/6]	Iowa St. [2]
E. Post Oak [5]	E. Robinson [8/2]
Franklin Rd [5/6]	Main St. [2]
36 th Ave NE [5]	

FHWA Bridge Investment Program

- Federal Highway Administration (FHWA) announced new funding opportunities June 13, 2022 through the Infrastructure Investment and Jobs Act (IIJA)
- Created 3 categories of program funding
 - Planning (up to 100% funded)
 - Bridge Projects (80/20 match)
 - Large Bridge Projects (50/50 match)
- Funding to improve safety, efficiency, and reliability of the movement of people and freight over bridges
- Provide financial assistance that leverages and encourages non-Federal contributions
- For bridges in poor condition, fair condition at risk of falling into poor condition, bridges that do not meet current geometric design standards, and bridges that cannot meet the load and traffic requirements of the regional transportation network



72nd Ave NE Bridge over Rock Creek (located south of Tecumseh Rd).

Built in 1938.

This Bridge is rated Functionally Obsolete due to its narrow deck width.

FHWA Bridge Investment Program



Porter Ave Bridge over Little River (located north of Tecumseh Rd).

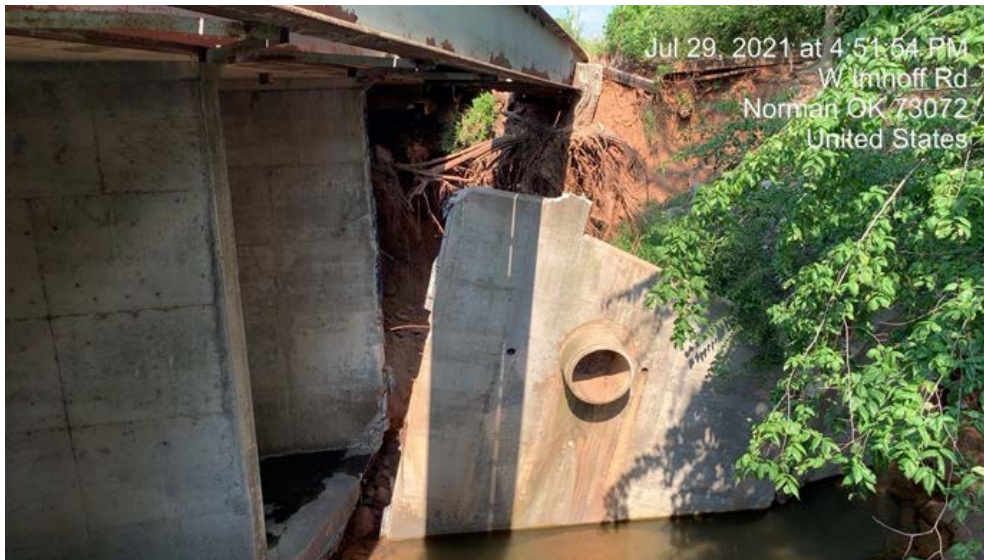
Built in 1937.

This Bridge is rated Functionally Obsolete due to its narrow deck width.

- The Federal Bridge Investment Program is funded for 5 years
- \$2.4 Billion nationwide annually
- Staff contracted with Garver, LLC to build an application package for a Bridge Investment Program Planning Grant for \$400,000.00
- The Planning Grant application submitted in July '22 was unsuccessful. One Planning Grant was awarded in Oklahoma to ODOT for an on-system bridge over Lake Texoma.
- Nationwide pool of both local and state entities creates very competitive environment

Key Take-Aways

- Norman has 80 bridges and over 300 culvert crossings
- Norman's bridges are safe but some are in need of replacement/major repair
- 23 City of Norman bridges were constructed prior to 1950
- Possible 10-year Bridge Maintenance Bond Election to replace/repair 19 bridges
- No current steady, predictable funding source for bridge replacement/major repair



Next Steps

- On October 11, 2022 Council approved contract K-2223-49 for engineering design for the 60th Ave NE Bridge and Phase 1 Hydraulic analysis and 30% plans for Porter Ave
- Bridges on 60th Ave NE and Porter Ave may qualify for federal grants when engineering design is complete
- Continue pursuit of grant funding opportunities



60th Ave NE Bridge over Rock Creek (located north of Rock Creek Rd).

Built in 1940.

This Bridge is rated Structurally Deficient and Load Posted for 4 Tons.

COUNCIL DIRECTION?

Joseph Hill, City of Norman Streets Program Manager
(405) 307-7276
joseph.hill@normanok.gov



Landlocked Parcels

**Community Planning & Transportation
Committee**

October 27, 2022



Landlocked Parcels

Parcels that do not have direct access to a public street

- Not allowed in Subdivision Regulations Section 19-203 and 19-407

Section 19-203 - Except as permitted by article VI of this chapter, it shall be unlawful for any person, firm or corporation to sell to any other person, firm or corporation any lot, parcel, tract or block of land to be used for other than agricultural purposes, regardless of the size or shape of said lot, parcel, tract or block, unless such lot, parcel, tract or block of land abuts on a public street or road for the distance required by the zoning regulations pertaining to the zoning district in which such lot, parcel, tract or block of land is situated, provided, however, that for all deeds filed of record prior to October 26, 1965, it shall be lawful to convey title to the total area described in each of said deeds.

Section 19-407 - In subdivisions for commercial and industrial use, lots should be of appropriate size and arrangement to provide for appropriate sanitation service, adequate off-street parking, and loading facilities based on the intended use and such lots shall abut a public street, frontage or otherwise, on a minimum of one side.

- Oklahoma City and Edmond have similar language

Landlocked Parcels

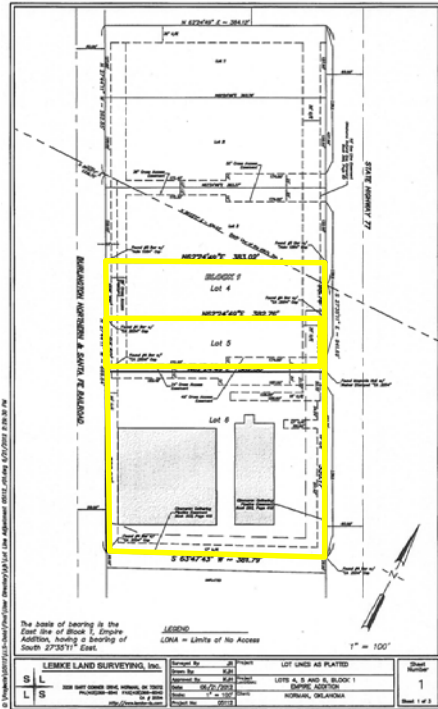
Parcels that do not have direct access to a public street

- Not allowed in Subdivision Regulations Section 19-407

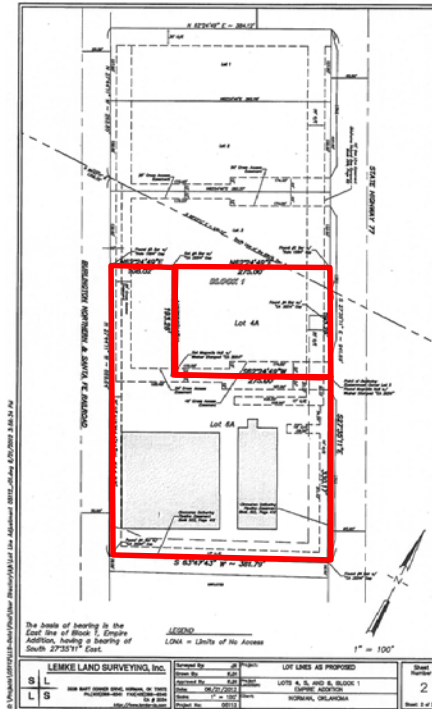
Section 19-407 - In subdivisions for commercial and industrial use, lots should be of appropriate size and arrangement to provide for appropriate sanitation service, adequate off-street parking, and loading facilities based on the intended use and such lots shall abut a public street, frontage or otherwise, on a minimum of one side.

- Oklahoma City and Edmond have similar language

Empire Addition Lot Line Adjustment (Filed of Record in 2012)

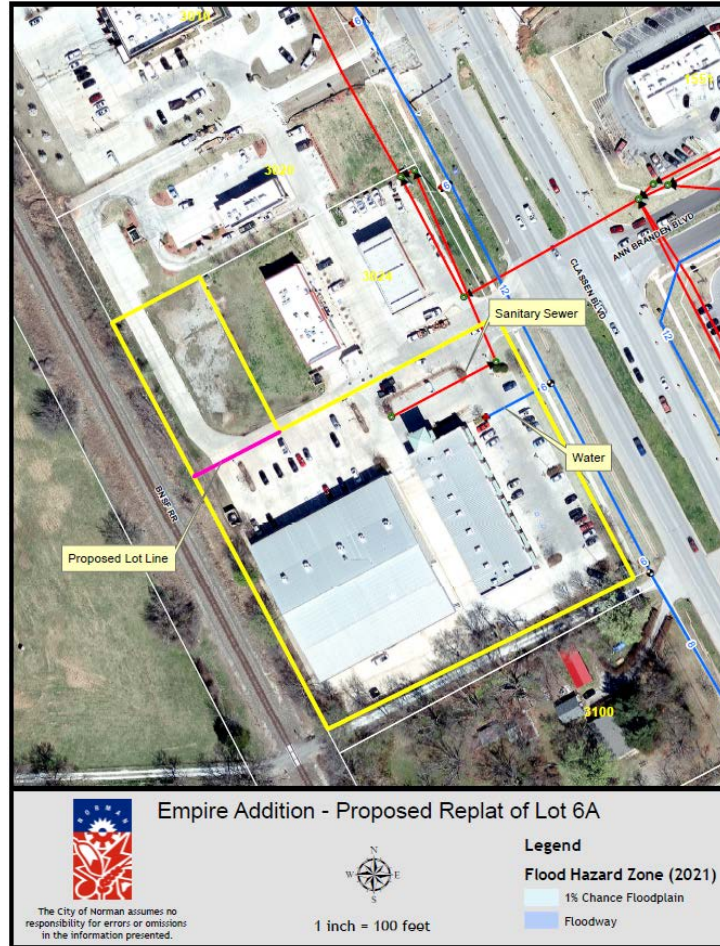


Lot Lines as Platted



Adjusted Lot Lines

Owner Seeking to Replat Lot 6A to Create 2 Lots



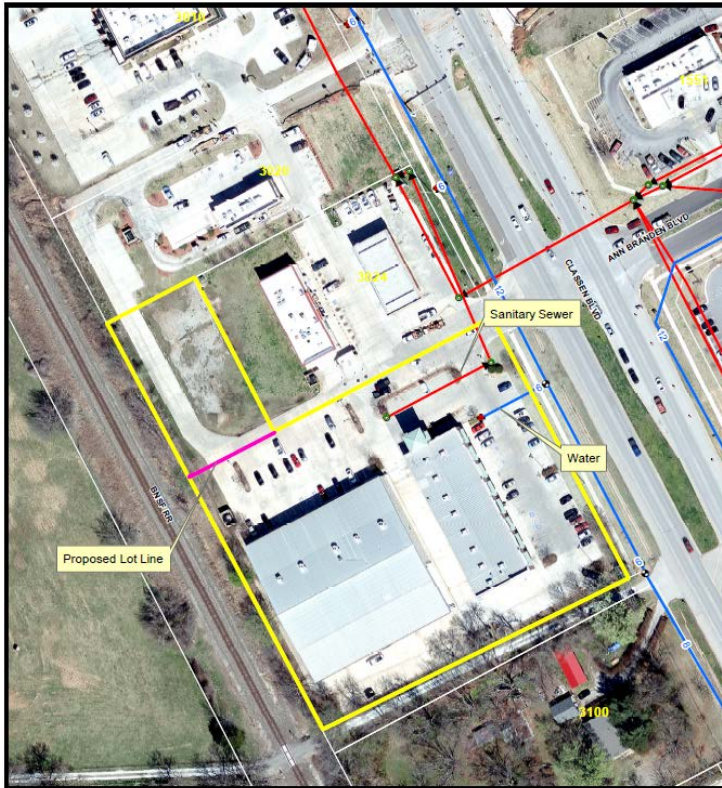
Empire Addition Replat Issues

Item 4.

- The proposed northwest lot does not have public water line or sanitary sewer available.
- The proposed northwest lot will not have frontage to a public street as required by Sections 19-203 and 19-407 of the subdivision regulations.

Possible Options Allowing Development

Item 4.



Empire Addition - Proposed Replat of Lot 6A



The City of Norman assumes no responsibility for errors or omissions in the information presented.



1 inch = 100 feet

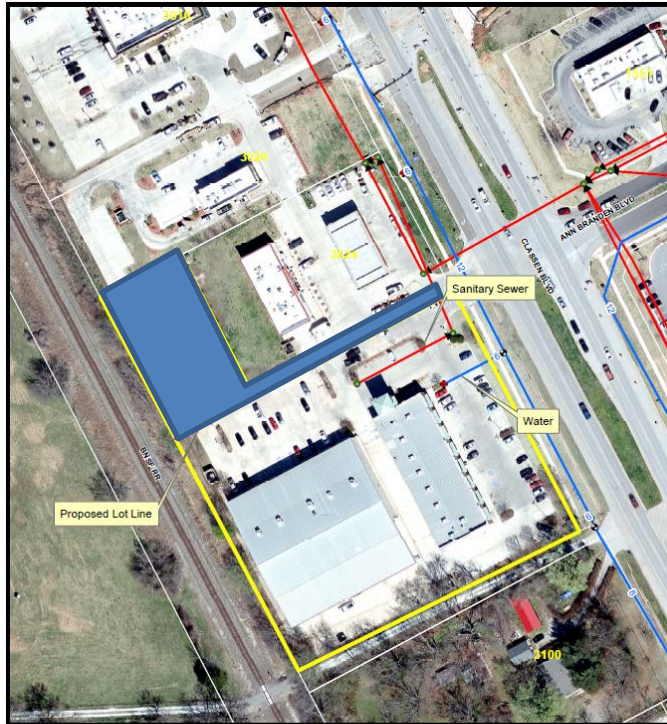
Legend

Flood Hazard Zone (2021)


- 1% Chance Floodplain
- Floodway

- Work with property owner to lease the property


Possible Options Allowing Development



Empire Addition - Proposed Replat of Lot 6A



The City of Norman assumes no responsibility for errors or omissions in the information presented.

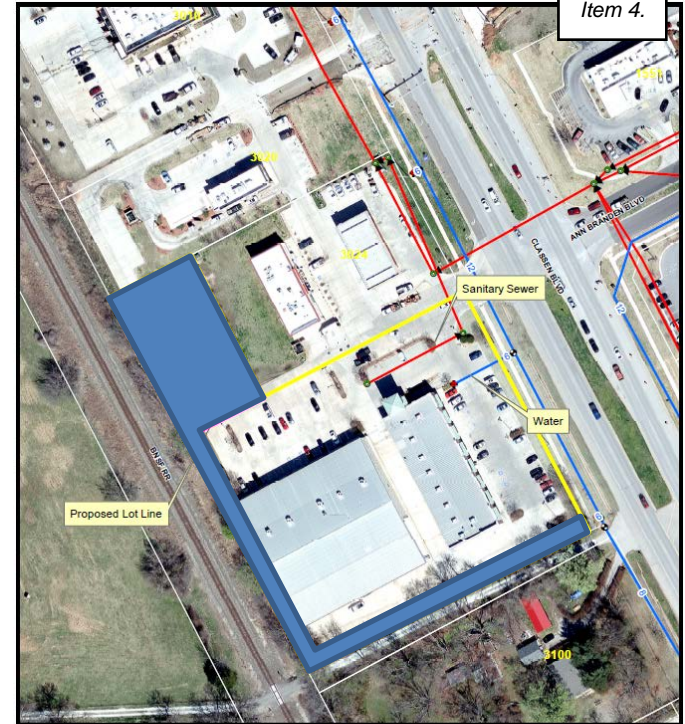


1 inch = 100 feet


Legend

- Flood Hazard Zone (2021)
- 1% Chance Floodplain
- Floodway


Create a frontage through subdividing the property (flag lot)



Empire Addition - Proposed Replat of Lot 6A



The City of Norman assumes no responsibility for errors or omissions in the information presented.



1 inch = 100 feet

Legend

- Flood Hazard Zone (2021)
- 1% Chance Floodplain
- Floodway

Flag Lots

Item 4.

24th AVENUE OFFICE PARK

BEING A PART OF THE SE/4 SECTION 26, T9N, R3W I.M.
NORMAN, CLEVELAND COUNTY, OKLAHOMA

OWNER'S CERTIFICATE AND DEDICATION

The undersigned Westwood Mini Storage, Ltd and Westwood Bowling Center, Ltd, both Oklahoma limited partnerships hereby certify that they are the owners of the legal title and the only person, firm or corporation having any right, title or interest, in and to the land shown on the annexed map or plat and does further certify that:

- That the owners of the title to said land which is shown on the annexed map or plat of Westwood Mini Storage, Ltd and Westwood Bowling Center, Ltd, being a part of the SE/4 of Section 26, T9N, R3W, I.M., Norman, Cleveland County, Oklahoma hereby dedicate the streets, avenues and drives as shown on said plat or map for the use of the public and its successors and assigns and guarantee a right title to the land so dedicated and has caused the same to be released of all encumbrances so that the title is clear except as shown on the Bonded Abstractor's Certificate.
 - That the area indicated on said plat or map as "Utility Easements" are hereby reserved for the purpose of locating, constructing, installing, maintaining, conducting and performing any public or quasi-public utility or utility function or service, above or beneath the surface of the ground, with rights of ingress and egress at any time for the purpose of installation, repair, maintenance, operation and removal of any public or quasi-public utility.
 - That said property covered by said plat or map and dedication is subject to certain restrictions, reservations, and covenants contained in a separate instrument, which will be filed for record in the office of the County Clerk of Cleveland County, Oklahoma subsequent to the filing of this plat.
- Witness our hand on this 7th day of February 1984

Westwood Bowling Center, Ltd, an Oklahoma limited partnership

Attest Secretary

By: FIRST FINANCIAL PLANNERS, INC.
General Partner

By: Don Armstrong, President
Don Armstrong, President

State of Oklahoma

County of Cleveland

The foregoing instrument was acknowledged before me this 7th day of February 1984, by Don Armstrong, President of First Financial Planners, Inc, an Oklahoma corporation, as the General Partner of Westwood Mini Storage, Ltd, an Oklahoma limited partnership, on behalf of the partnership.

My commission expires:

State of Oklahoma

County of Cleveland

Notary Public

COUNTY TREASURER'S CERTIFICATE

I, Margaret Smith, do hereby certify that I am the duly elected, qualified and acting County Treasurer of Cleveland County, State of Oklahoma; that the tax records of said County show all taxes are paid for the year 1983 and prior years on the land shown on the annexed plat, and the required notary security has been deposited in the office of the County Treasurer according to payment of the current laws, State in witness where, and County Treasurer has caused this instrument to be executed on this 13 day of February 1984

Margaret Smith
County Treasurer

CITY PLANNING COMMISSION APPROVAL

I, Dave Loy, Chairman of the Norman, Oklahoma Planning Commission certify that the Commission duly approved this plat on the 14th day of June 1983

David Loy
Chairman

ACCEPTANCE OF DEDICATION BY CITY COUNCIL

Be it resolved by the City Council of Norman, Oklahoma, that the aforesaid dedication shown hereon are accepted. Approved by the Council of the City of Norman, Oklahoma, this 14th day of February 1984

Attest City Clerk

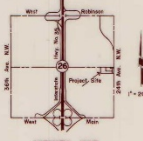
Don Edrington
Mayor

Westwood Mini Storage, Ltd
or Oklahoma limited partnership

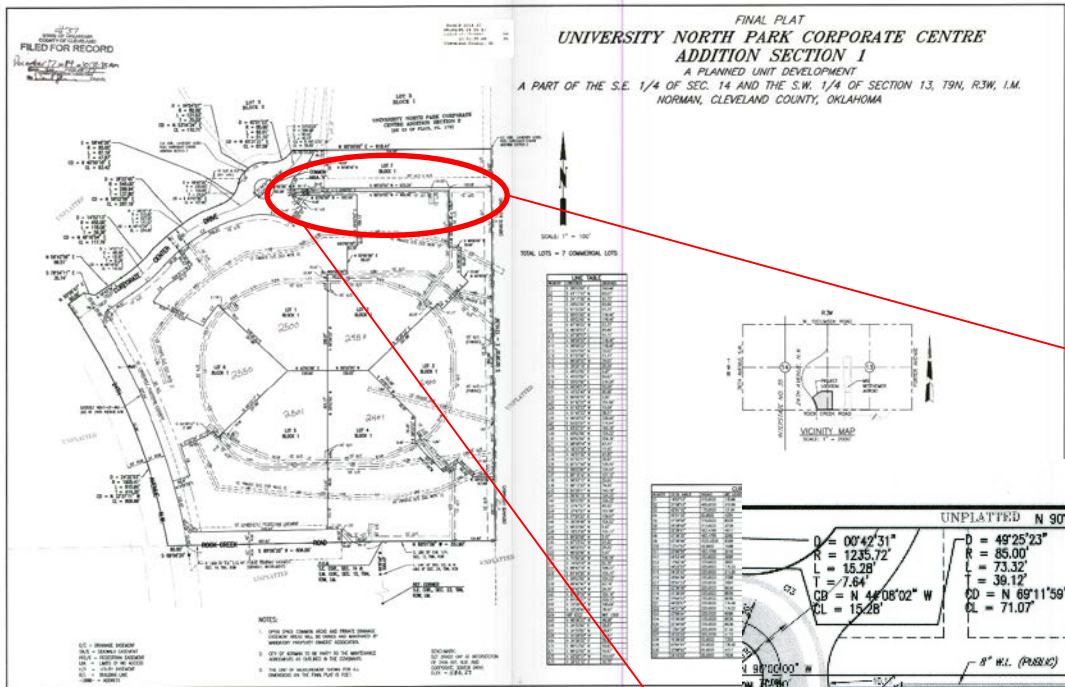
By: FIRST FINANCIAL PLANNERS, INC.
General Partner

By: Don Armstrong, President
Don Armstrong, President

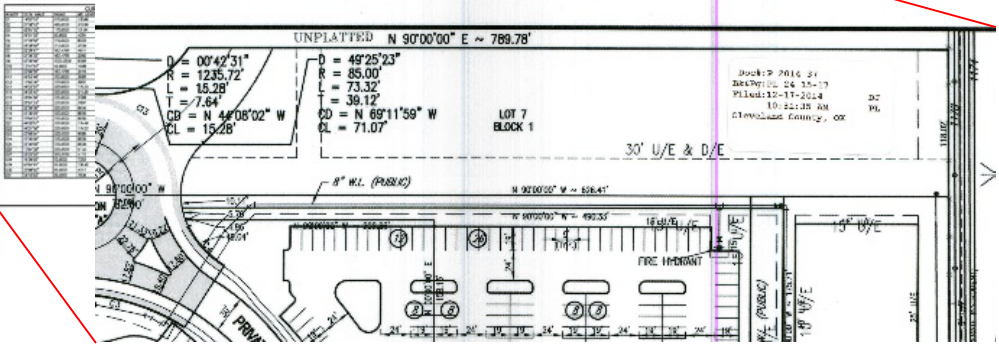
Attest Secretary



Flag Lots



10' flag to Private road



Flag Lots

Item 4.



QUESTIONS?

