

FM Area Diversion



METRO
FLOOD
DIVERSION
AUTHORITY

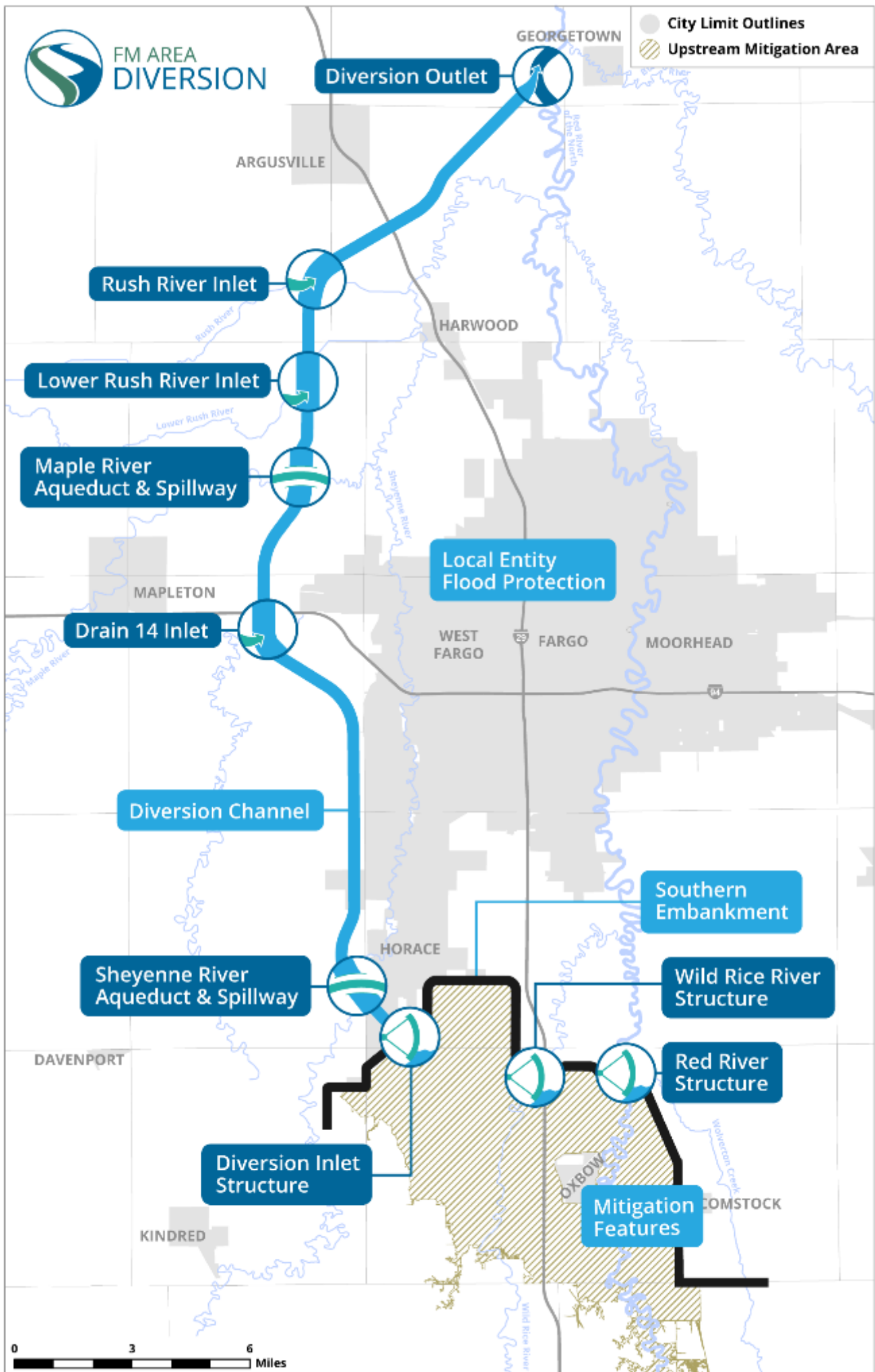
Building permanent,
reliable flood protection





FM AREA DIVERSION

- City Limit Outlines
- ▨ Upstream Mitigation Area



Project Development



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\$3+ Billion

infrastructure
project for
permanent flood
protection



14

pieces of
legislation



180+

utility
adjustments

Collaboration across

50+ organizations



○ **20** utility companies

○ **30** federal, state and local agencies



2,000

permit conditions
tracked across

200 permits



70

MOUs/
Agreements

Flooding History

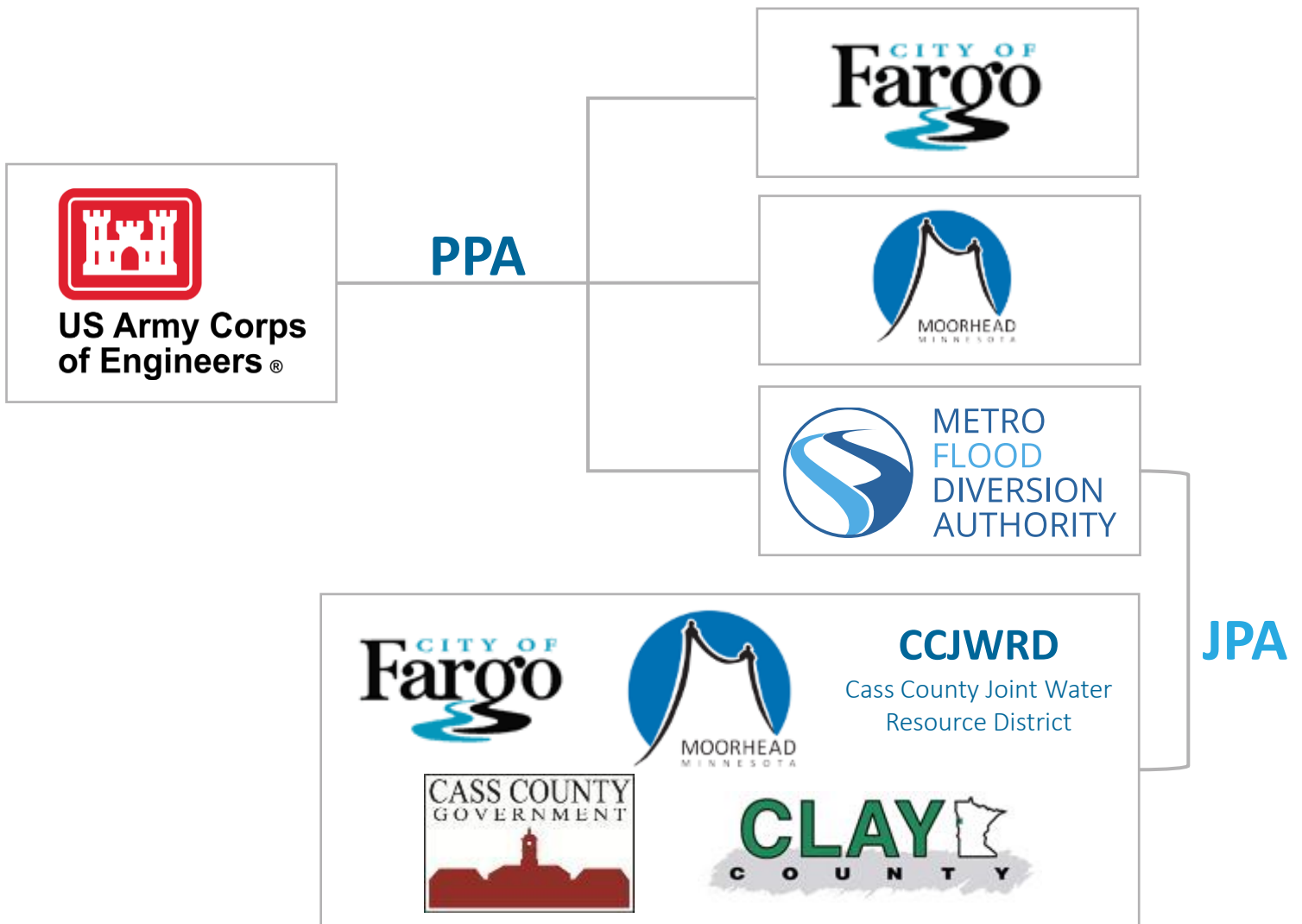


- Red River in Fargo **exceeded flood stage every year** from 1993-2011
- **235,000 people** – and their homes, businesses and property – are **at risk of catastrophic flooding**
- **Economic impacts**
 - 1997 flood: \$3.5 billion in damages
 - Millions spent fighting floods, including \$8.2M in 2009
 - Flood insurance will not be needed for those protected after the diversion's construction

Fargo's Top 10 Floods

1. 40.84' – 2009
2. 39.72' – 1997
3. 39.10' – 1897
4. 38.81' – 2011
5. 37.34' – 1969
6. 37.13' – 2006
7. 36.99' – 2010
8. 36.69' – 2001
9. 35.39' – 1989
10. 35.04' – 2019

Split Delivery Governance Structure



The Project Partnership Agreement (PPA) is between the government (USACE) and non-federal partners (MFDA, City of Fargo and City of Moorhead) and serves as the official agreement marking the beginning of the FM Area Diversion.

The Joint Powers Agreement (JPA) is an agreement between Member Entities that establishes duties, responsibilities, and obligations regarding the FM Area Diversion Project.

P3 Structure



Governing Authority

13-member Board of Authority and staff



Joint venture of:



P3 Partner

Responsible for designing, constructing, financing, operating, and maintaining the Stormwater Diversion Channel & Associated Infrastructure



Design & Construction Arm of RRVA

Responsible for design and construction of Stormwater Diversion Channel & Associated Infrastructure

Project Delivery Structure

Stormwater Diversion Channel & Associated Infrastructure



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RED RIVER VALLEY
ALLIANCE

Delivered by the P3

- 30-mile channel
- 2 aqueducts
- Diversion outlet
- 3 railroad crossings
- 14 road crossings

Southern Embankment & Associated Infrastructure



US Army Corps
of Engineers®

Delivered by USACE

- 20-mile earthen embankment
- 3 water control structures
- Interstate bridge & 4-mile road raise
- Road crossings

Mitigation Features and Associated Infrastructure



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US Army Corps
of Engineers®

Delivered by MFDA, USACE & City & County Governments

- Cemetery mitigation
- Wetland mitigation
- Local levees
- Flowage easements

Local Entity Flood Protection & Associated Infrastructure



MOORHEAD
MINNESOTA

Delivered by USACE & City & County Governments

- In-town levees/floodwalls
- Stormwater lift stations
- Property acquisitions
- Road improvements/raises

P3 Overview



Savings & Speed

Using a P3 for the FM Area Diversion project will save about \$330 million in construction costs and deliver the completed project 10 years sooner

Benefits

- MFDA retains ownership and control over operating standards and other requirements
- RRVA, as the private sector partner, delivers innovative technical solutions within MFDA requirements
- The engineer and contractor work collaboratively to lower construction cost and deploy new technology
- MFDA receives a fixed-price bid and RRVA assumes the risks of delay, cost escalation, etc.
- Private entity holds debt and is incentivized to deliver the project in order to receive payment



RRVA, our P3 developer, is a consortium of:



P3 vs. Traditional

 **2027** **Projected Completion**
\$2.75B*
Completed in 6 years

2028

2029

2030

2031

2032

2033

2034

2035

2036



FM AREA
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First P3 flood management
project in North America

First P3 civil works project
with the U.S. Army Corps of
Engineers



2037

Alternative

\$3.1B*

Completed in 16 years

** Reflects 2018 dollars*