Proof of Concept: Federated Data Sharing Model

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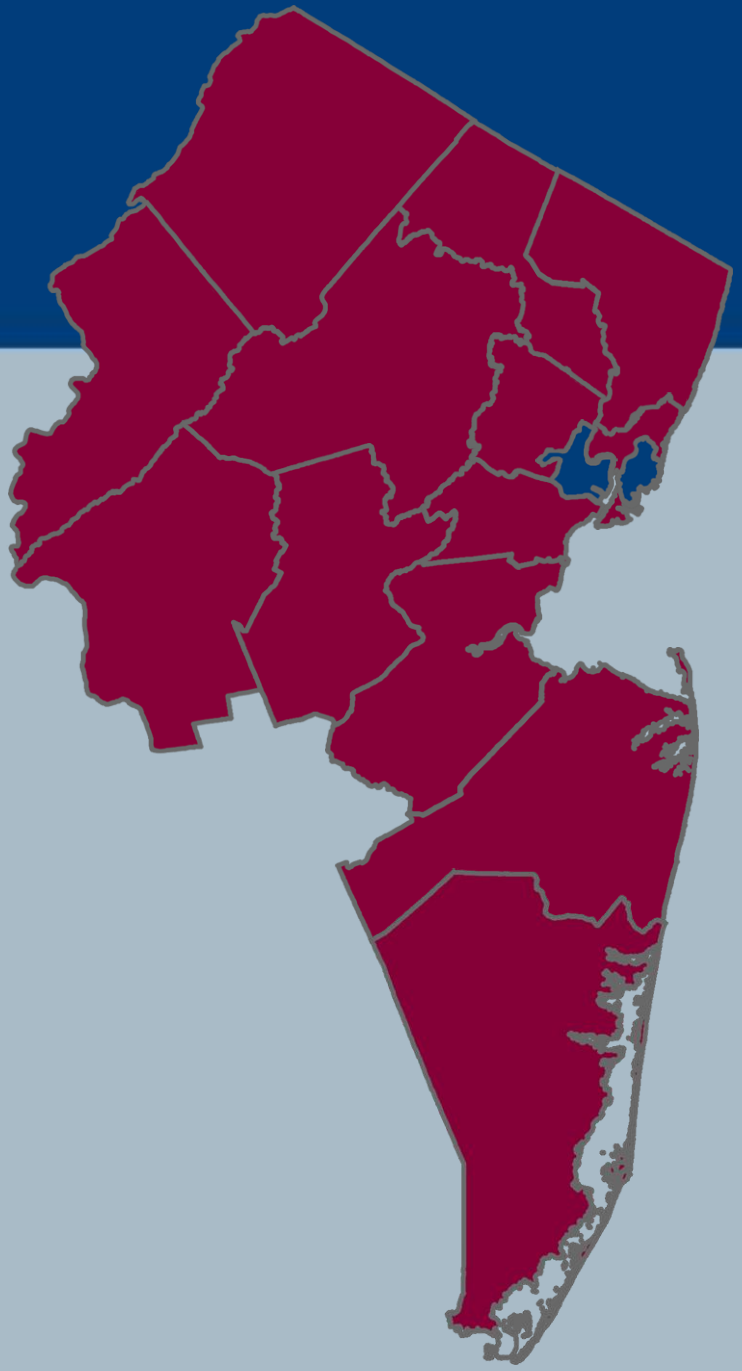
NJTPA Region

Bergen
Essex
Hudson
Hunterdon
Jersey City
Middlesex
Monmouth
Morris
Newark
Ocean
Passaic
Somerset
Sussex
Union
Warren



NJTPA

North Jersey Transportation Planning Authority

The Metropolitan Planning Organization for Northern New Jersey

STANDING COMMITTEES

Planning & Economic Development Committee

Project Prioritization Committee

Freight Initiative Committee

Regional Transportation Advisory Committee

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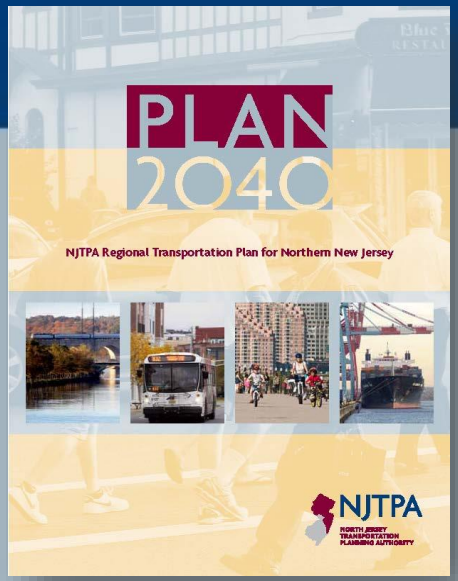
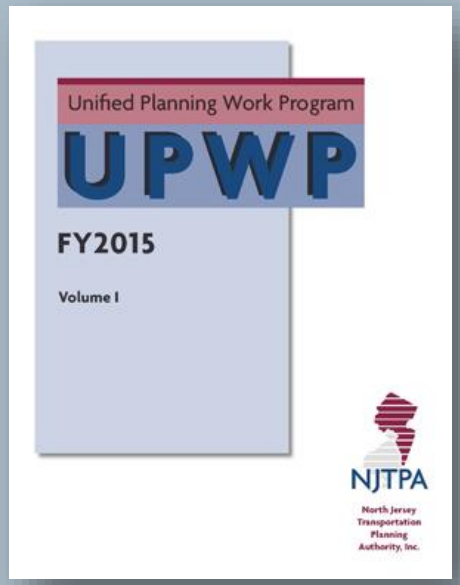
MPO Key Products

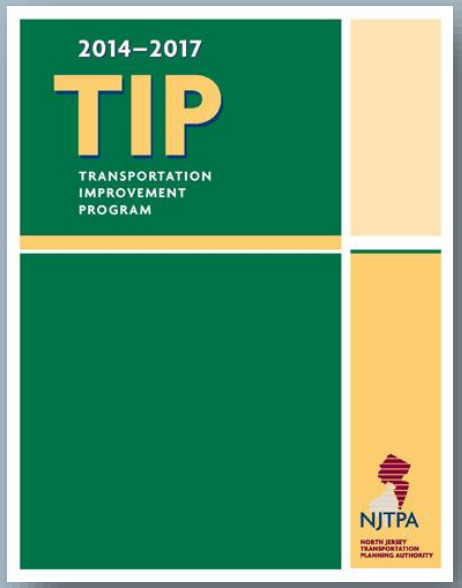


Regional Transportation Plan (RTP)

Updated every four years

Planning





Transportation Improvement Program (TIP)

Updated every two years

Regional Transportation System

Road Network:

- 147 million vehicle miles each day
- 26,000 miles of roads, including 177 miles of toll roads
- 4,800 bridges

Transit Network:

- 732,000 trips daily
- 13% of commuters ride transit
- 250 bus routes
- Commuter rail: 390 miles of track, 150 stations

Federated Sharing Model

The Beginning

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Federated Sharing Model: The Beginning

- Enterprise Geographic Information System database developed and implemented in 2009
- Data repository for the region
- Web-interface for data exchange

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Federated Sharing Model: The Beginning

Email GIS Technical Contacts every quarter

Data updates uploaded to FTP site

Data QA/QC by GIS staff at NJTPA

Uploaded to the Web-Interface

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Federated Sharing Model: The Beginning

- Challenges:
  - Changing technology
  - Static process

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Federated Sharing Model

A Technology Shift

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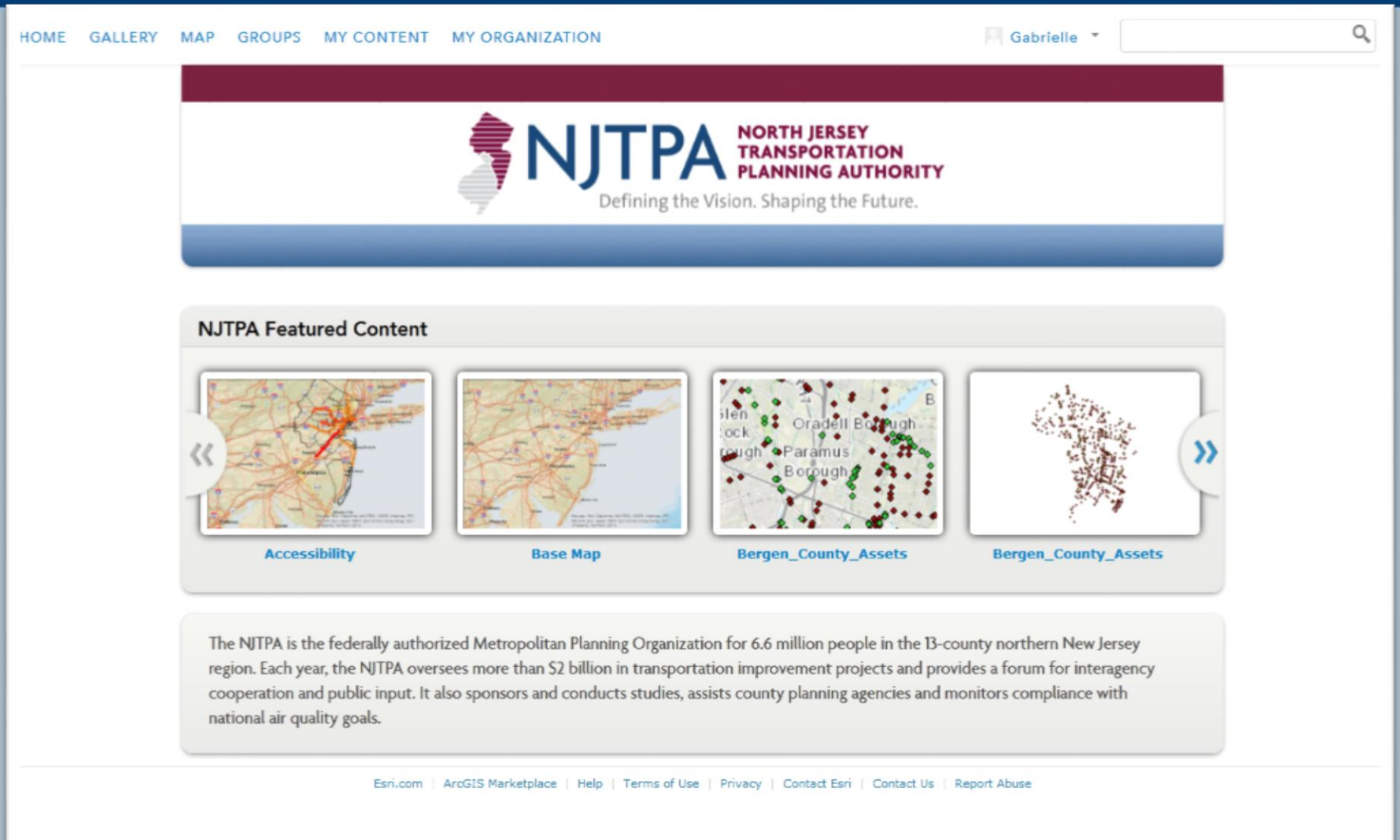
Federated Sharing Model: A Technology Shift



Federated Sharing Model: A Technology Shift

Approach:

- Identification of seven pilot organizations
- Informational Session on project vision and goals
- On-site support for set-up of AGO
- Initiate exchange

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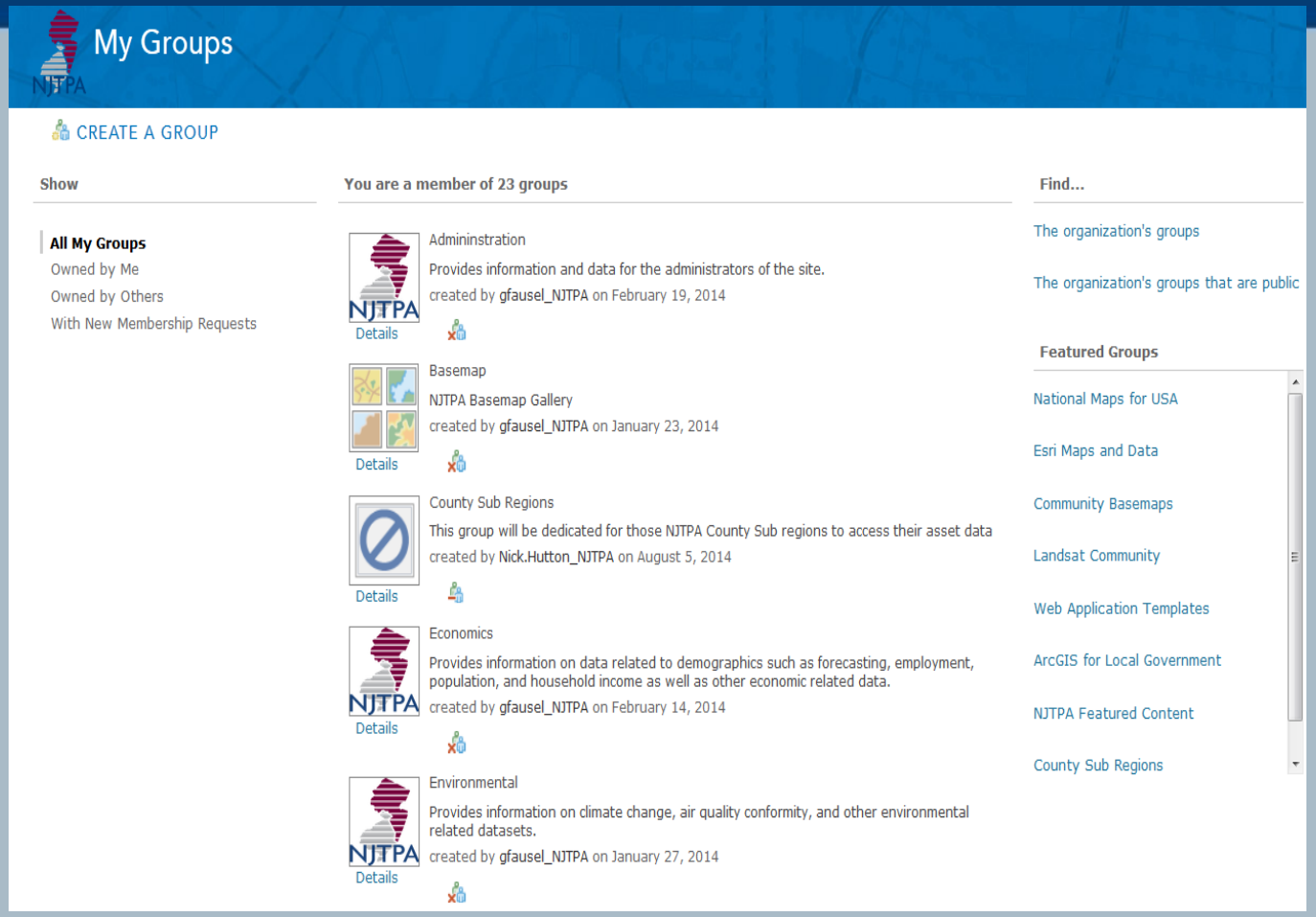
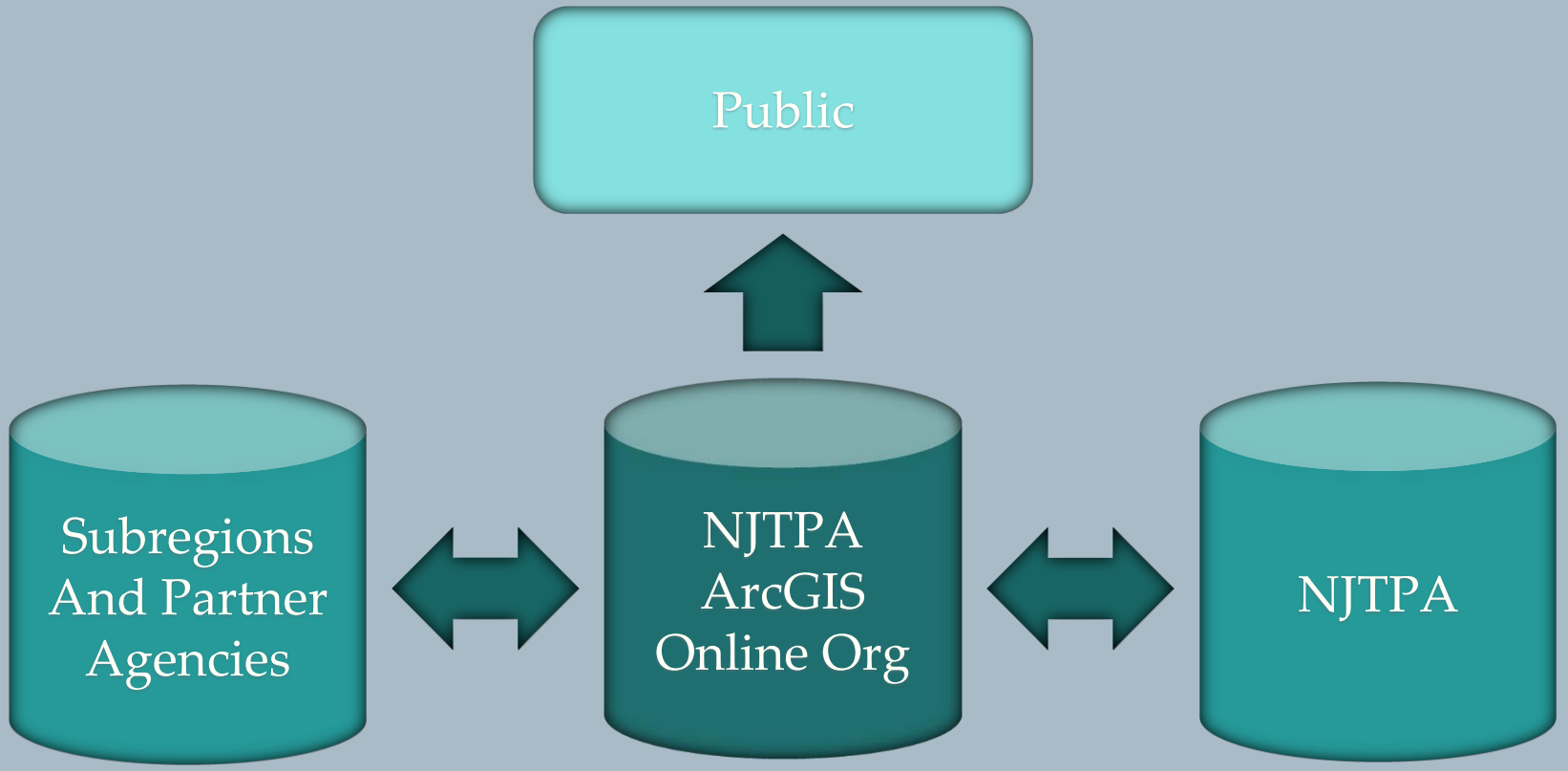
Federated Sharing Model: A Technology Shift

Group Types:

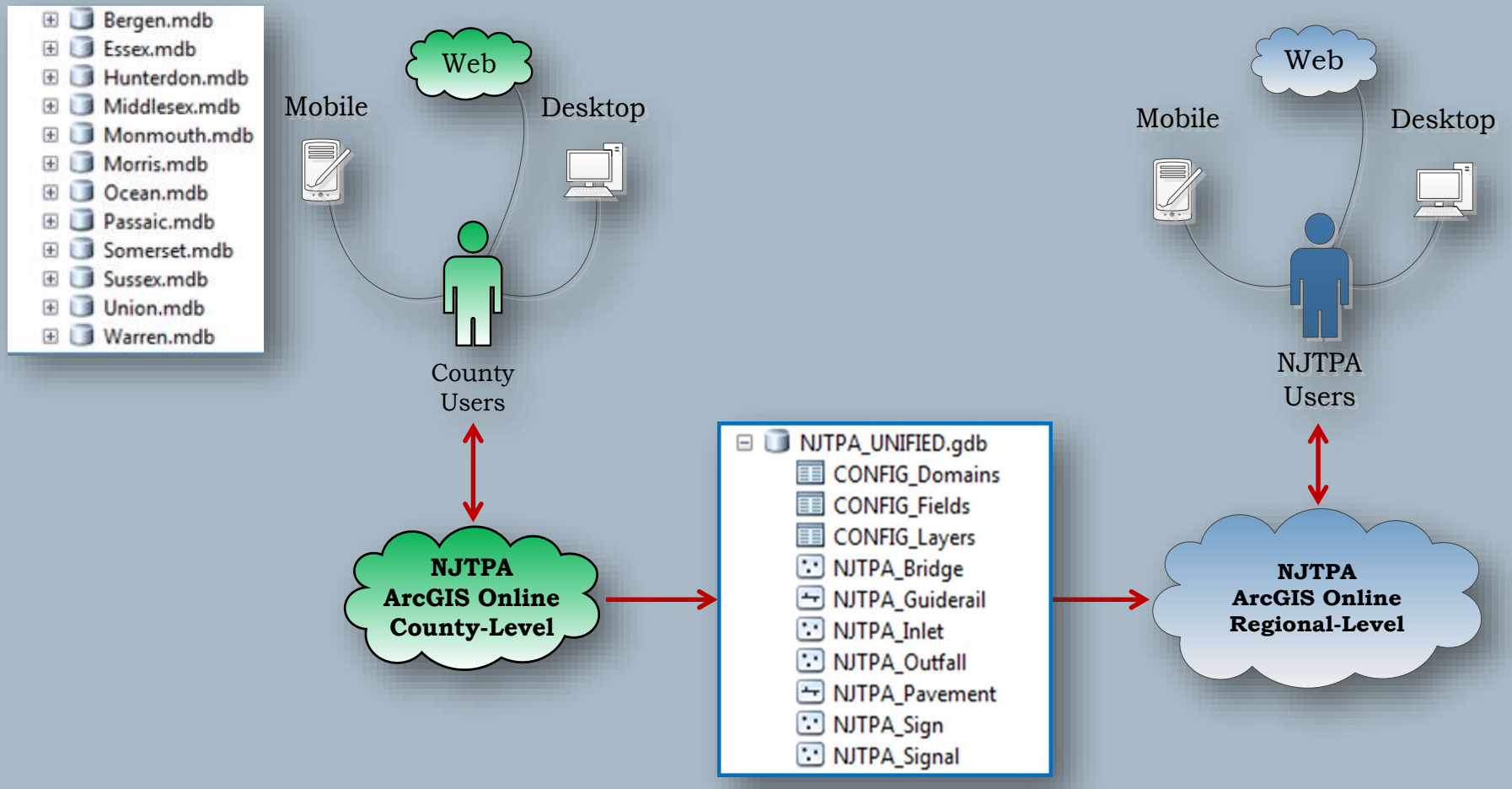
- Operational
  - Admin
  - NJTPA Share
  - NJTPA Feature Content
- Content
  - Transportation
  - Economics
  - Land Use
  - Environmental



Federated Sharing Model: A Technology Shift



Federated Sharing Model: Example



Federated Sharing Model: Example

- Internal sharing and analysis of data for non-GIS users
  - Enhanced workflows
  - Greater accessibility to our data resources
  - Increased productivity/efficiency

Federated Sharing Model: Next Steps

- Follow up with pilot organizations for feedback
- Continue to populate the NJTPA organization with meaningful datasets
- Deployment and training for additional partner agencies and staff
- Development of new applications and GIS services to support our partner agencies

Questions

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Thank You

Defining the Vision. Shaping the Future.

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