Arizona State Freight Plan
Freight Advisory Committee Meeting #2

December 7, 2021
Interactive Polling – PollEverywhere

**Join by Web**

1) Go to PollEV.com
2) Enter streets315
3) Respond to each activity

**Join by Text Message**

1) Text streets315 to 22333
2) Respond to each activity using texts
Please tell us what type of organization you represent...

Academia
Airport
Arizona DOT
FHWA
Government/MPO/RTPO
Logistics
Manufacturer
Partner State
Private Consultant
Railroad
Trade Association
Trucking Carrier
Agenda

• Primary Highway Freight System Redesignation
• Freight Forecast Update
• Draft Vision and Goals
• Next Steps
Primary Highway Freight System (PHFS) Redesignation
Summary Survey Results

- 43% Strongly disagree
- 9% Agree
- 48% Strongly agree
Freight Forecast
Upcoming Poll Question:

Does any of this information surprise you? If so, what?
<table>
<thead>
<tr>
<th></th>
<th>2019 Tons (000's)</th>
<th>2045 Tons (000's)</th>
<th>2019 Share of Total Tons</th>
<th>CAGR** 2019-2045</th>
<th>2019 Value (Million $)</th>
<th>2045 Value (Million $)</th>
<th>2019 Share of Total Value</th>
<th>CAGR** 2019-2045</th>
</tr>
</thead>
<tbody>
<tr>
<td>Truck</td>
<td>284,942</td>
<td>444,216</td>
<td>54.0%</td>
<td>1.7%</td>
<td>395,239</td>
<td>715,923</td>
<td>30.2%</td>
<td>2.3%</td>
</tr>
<tr>
<td>Rail</td>
<td>242,761</td>
<td>405,072</td>
<td>46.0%</td>
<td>2.0%</td>
<td>854,422</td>
<td>1,588,994</td>
<td>65.4%</td>
<td>2.4%</td>
</tr>
<tr>
<td>Air</td>
<td>364</td>
<td>875</td>
<td>0.1%</td>
<td>3.4%</td>
<td>57,784</td>
<td>125,810</td>
<td>4.4%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Total</td>
<td>528,067</td>
<td>850,163</td>
<td>1.8%</td>
<td>2.4%</td>
<td>1,307,445</td>
<td>2,430,727</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Compound Annual Growth Rate – mean annual growth rate from 2019 to 2045
Inbound Freight Compound Annual Growth Rate 2019-2045

Inbound Flows CAGR
-6% - -3.8%
-3.7% - 0.5%
0.6% - 1.6%
1.7% - 2.2%
2.3% - 2.7%
Outbound Freight Compound Annual Growth Rate 2019-2045
Top 10 Commodities by Weight*

- Gravel or Sand
- Petroleum Refining Products
- Warehouse & Distribution Center
- Misc Industrial Organic Chemicals
- Grain
- Broken Stone or Riprap
- Misc Waste or Scrap Plastic Matter or Synth Fibers
- Motor Vehicles
- Asphalt Paving Blocks or Mix

*Excluding Freight of All Kinds
Top 10 Commodities by Value*

*Excluding Freight of All Kinds

Million USD 2019  Million USD 2045

- Small Packaged Freight Shipments
- Motor Vehicles
- Warehouse & Distribution Center
- Pharmaceuticals
- Motor Vehicle Parts or Accessories
- Electrical Equipment
- Plastic Matter or Synth Fibers
- Misc Fabricated Textile Products
- Transportation Equipment
- Petroleum Refining Products
Does any of this information surprise you? If so, what?
Arizona Freight Plan Update
Draft Vision and Goals
National Context
National Freight Policy Strategic Goals

• SAFETY: Improve the safety, security, and resiliency of the national freight system.

• INFRASTRUCTURE: Modernize freight infrastructure and operations to grow the economy, increase competitiveness, and improve quality of life.

• INNOVATION: Prepare for the future by supporting the development of data, technologies, and workforce capabilities that improve freight system performance.
Additions to National Freight Plan (IIJA/BID)

- (12) best practices for **reducing environmental impacts** of freight movement (including reducing local air pollution from freight movement, stormwater runoff, and wildlife habitat loss resulting from freight facilities, freight vehicles, or freight activity);

- (13) possible strategies to **increase the resilience of the freight system**, including the ability to anticipate, prepare for, or adapt to conditions, or withstand, respond to, or recover rapidly from disruptions, including extreme weather and natural disasters;

- (14) strategies to promote United States **economic growth and international competitiveness**;

- (15) consideration of any potential unique **impacts of the national freight system on rural and other underserved and historically disadvantaged communities**;

- (16) strategies for **decarbonizing freight movement, as appropriate**; and

- (17) consideration of the impacts of **e-commerce** on the national multimodal freight system.
National Performance Goals

• SAFETY: To achieve a significant reduction in traffic fatalities and serious injuries on all public roads.

• INFRASTRUCTURE CONDITION: To maintain the highway infrastructure asset system in a state of good repair

• CONGESTION REDUCTION: To achieve a significant reduction in congestion on the National Highway System

• SYSTEM RELIABILITY: To improve the efficiency of the surface transportation system

• FREIGHT MOVEMENT AND ECONOMIC VITALITY: To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development.

• ENVIRONMENTAL SUSTAINABILITY: To enhance the performance of the transportation system while protecting and enhancing the natural environment.

• REDUCED PROJECT DELIVERY DELAYS: To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development and delivery process, including reducing regulatory burdens and improving agencies' work practices.
2017 Arizona Freight Plan Vision

Arizona’s freight transportation system enhances economic competitiveness and quality growth through effective system performance and management

Draft Updated Vision: Arizona’s freight transportation system enhances economic competitiveness and quality growth through innovation and effective system management
Looking Forward: Priorities
What are the highest priority topics that you feel ADOT should address to improve freight in Arizona?
Draft Freight Plan Goals
Additions to Freight Plan Requirements (IIJA/BID)

**PLAN CONTENTS.**—A State freight plan described in subsection (a) shall include, at a minimum...

- (16) Strategies and goals to decrease—
  - (A) the severity of impacts of *extreme weather and natural disasters* on freight mobility;
  - (B) the impacts of freight movement on local *air pollution*;
  - (C) the impacts of freight movement on *flooding and stormwater runoff*; and
  - (D) the impacts of freight movement on *wildlife habitat loss*;

- Each State freight plan under this section shall include a requirement that the State, in carrying out activities under the State freight plan—
  - (1) enhance *reliability or redundancy* of freight transportation; or
  - (2) incorporate the ability to *rapidly restore access and reliability* with respect to freight transportation.

[Links to relevant sections of the United States Code and GovTrack.us]

https://www.govtrack.us/congress/bills/117/hr3684/text/enr#link=B_I_A_21104_a~T1&nearest=HD185291287BD4F5F871B54B983B175DF ; https://www.law.cornell.edu/uscode/text/49/70202
Goals

• **GOALS** are broad, over-arching statements that describe desired outcomes.
  
  • Goals answer the question “*What are we trying to achieve?*”
  
  • Goals should be directional but not focused on the “how”
Draft Arizona Freight Goals

• SAFETY: A safe and secure freight transportation system

• SYSTEM MANAGEMENT & MOBILITY: A reliable, resilient transportation system that enables efficient freight movement, and provides access to economic opportunity across Arizona

• COMPETITIVENESS: Strategic policies, investments, partnerships, and infrastructure that position Arizona to benefit from emerging opportunities and enhance its economic competitiveness in key sectors
Draft Arizona Freight Goals

• SAFETY: A safe and secure freight transportation system
<table>
<thead>
<tr>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very Well</td>
<td></td>
</tr>
<tr>
<td>Mostly</td>
<td></td>
</tr>
<tr>
<td>Somewhat</td>
<td></td>
</tr>
<tr>
<td>Not At All</td>
<td></td>
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</tbody>
</table>
• SYSTEM MANAGEMENT & MOBILITY: A reliable, resilient transportation system that enables efficient freight movement, and provides access to economic opportunity across Arizona
SYSTEM MANAGEMENT & MOBILITY: How well does this goal represent your priorities for Arizona's freight system?

Very Well
Mostly
Somewhat
Not At All
Draft Arizona Freight Goals

• COMPETITIVENESS: Strategic policies, investments, partnerships, and infrastructure that position Arizona to benefit from emerging opportunities and enhance its economic competitiveness in key sectors
COMPETITIVENESS: How well does this goal represent your priorities for Arizona's freight system?

Very Well
Mostly
Somewhat
Not At All
What topics or priorities are missing from the draft goals?
What topics don't belong in the draft goals?
Next Steps
Questions?
Thank you for your time!