



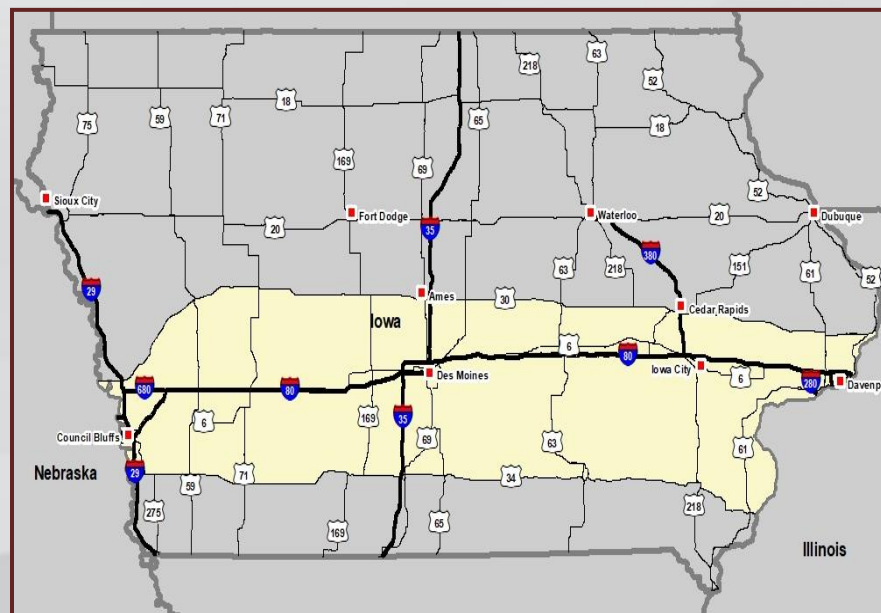
Freight Advisory Council

December 1, 2017

1. I-80 PEL Study Overview
2. I-80 Toll Financing Study
3. Next Steps

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I-80 Planning and Environmental Linkages (PEL) Study



- Define a long-term **I-80 Vision**
- Conducted as a PEL – streamline implementation:
 - Evaluate improvement strategies
 - Consider environmental and economic impacts
 - Include public involvement and agency coordination
 - Develop implementation plan for best strategy



Make system decisions that affect improvement strategies along the entire corridor:

- What are the visions and goals for the I-80 system?
- What is the right size of the I-80 system?
- Should alternative financing strategies be used?
- What is the potential cost to reconstruct the system?
- How do we prioritize I-80 into projects?



I-80 PEL Study – Goals and Objectives

Goal and Objectives	Summary of Need
Relieve Congestion	Reduced travel speeds and times due to growing traffic
Improve Safety	Increases in number of crash fatalities and injuries as traffic grows - 63 fatal and 157 major injury crashes last five years
Maintain Infrastructure	Pavement and bridges reaching end of service life -\$4,300M needed (2018 to 2050) for existing I-80 infrastructure
Accommodate the Future	Need to adapt to future changes in vehicle automation and forecast weather conditions
Support Iowa Economy	Freight on Iowa's highways to grow 66% by 2040 - I-80 carries 53% of Iowa's Interstate truck freight
Afford Implementation	Iowa has limited funds for implementing I-80 Vision, which affects ability to timely construct improvements



Benefits of a PEL study

- Gives us a systematic and dynamic plan for reconstructing all of I-80
- Answers big picture questions that have to be answered in lower level NEPA documents
- Builds consistency in approach across the system
- Let's us investigate financing and quantify the benefits and costs
- **Does not tie our hands financially...allows flexibility**

Schedule & Status

Tech Memos

1	Public Involvement Plan	DONE	IN HOUSE
2	Overhead Bridges	DONE	IN HOUSE
3	Guiding Principles	DONE	IN HOUSE
4	Truck Accommodation	DONE	IN HOUSE
5	Diversion Strategies	DONE	IN HOUSE
6	Modal	DONE	CONSULTANT
7	Automated Vehicles	DONE	CONSULTANT
★	Tolling & Alt. Financing	DRAFT	CONSULTANT
•	Resiliency and Vulnerability	DRAFT	CONSULTANT
•	Existing Conditions Analysis	DRAFT	CONSULTANT
•	Vision for Infrastructure Invest.	Draft due end of 2017	CONSULTANT

INTERSTATE 80
PLANNING STUDY (PEL)

Public Involvement Plan (PIP)

Purpose

- Inform and raise awareness of the study
- Generate interest from the general public/stakeholders
- Solicit feedback



Public Involvement

Project Website

<http://www.iowadot.gov/interstatestudy>



**Public Meeting #1 Complete July 2016
(online)**



**Public Meeting #2 – Complete July 2017
(online)**



**Public Meeting #3 – Coming February 2018
(online)**



**Public Meeting #4 – Coming late Spring 2018
(in-person)**



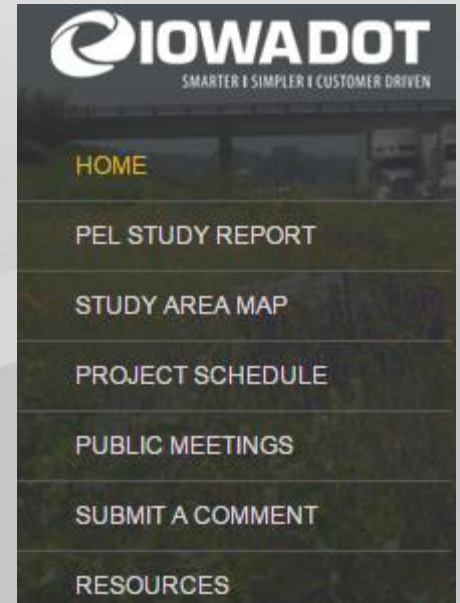
Public Feedback

Project Website

www.iowadot.gov/interstatestudy

Purpose of the website:

- Source for the public, resource agencies, local officials, etc. to sign-up to and stay connected
 - **Over 1,100 Subscribers**
- Early involvement in the transportation planning process
- I-80 system users' can share their opinions and fill out a survey
 - **Over 3,000 surveys filled out**



I-80 Toll Financing Study

Input Exercise

What are the Benefits and Challenges of Tolling?

- Results of today's input will be part of the public involvement for the I-80 PEL study.
- Input will help guide DOT's recommendation for the I-80 Vision for Infrastructure Investment



I-80 Toll Financing Study

Input Exercise

Benefits
of Tolling

Challenges
of Tolling

- ❖ Use the green Post-It Notes to write down your thoughts on the benefits (positives) of tolling and the orange Post-Its for the challenges or negatives of tolling.
- ❖ During the presentation, we'll collect the notes and group them.
- ❖ Following the presentation, we'll have an additional input exercise.



Why is Iowa DOT doing an I-80 toll study?

- I-80 needs improvements. DOT has a responsibility to look at financial options for improvements.
- Undertaking Study of I-80 – the potential for toll funding can help answer certain questions:
 - What is optimal improvement strategy?
 - General widening (6 General-Purpose lanes)
 - Freight focused (4 truck lanes and 6 GP lanes)
 - How fast can strategy be implemented?
- Are Improvement Strategies financially feasible with toll funding?
 - 10 lanes - NO
 - 6 lanes - YES



Why is Iowa DOT doing an I-80 toll study?

Outline continued:

- Why change from the traditional Pay-as-you-go funding approach?
 - Time and funding commitment comparison
- What could tolling look like?
 - Conceptual tolling scheme
 - Financial results
 - Other considerations
- Challenges
- Summary
- Next Steps



The I-80 PEL will recommend an improvement strategy and an implementation plan.

What questions did the Toll Financing Study try to answer?

- Is tolling financially feasible?
- What would tolling look like?
- What are the benefits?
- What are the challenges?



Improvement Strategies

Consideration of a Truck-Only Lanes option



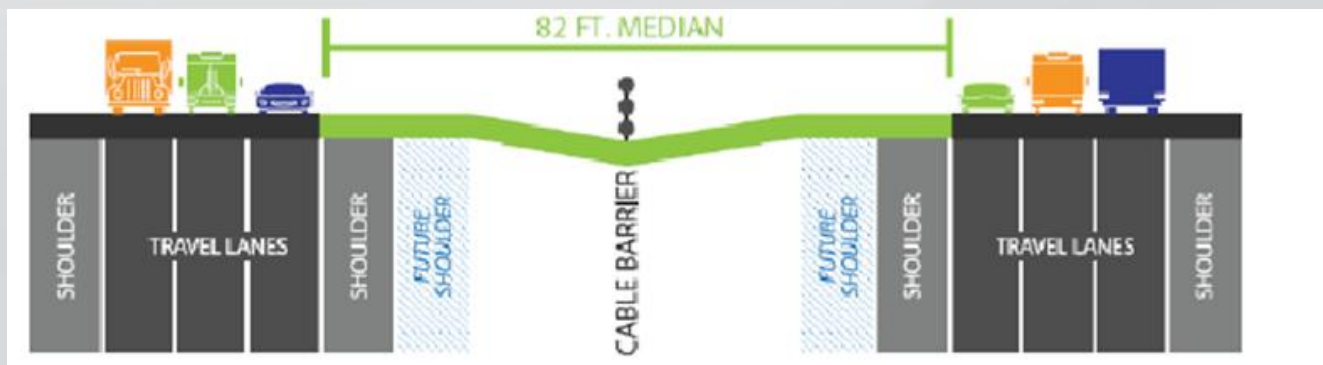
- 4-Lane Truck-Only Facility and 6 General Purpose Lanes (248 miles)
- Construction Cost = \$6,490M (2017)

Not financially viable using pay-as-you-go or toll funding



Improvement Strategies

6 General Purpose Lanes - **The New I-80 Vision**

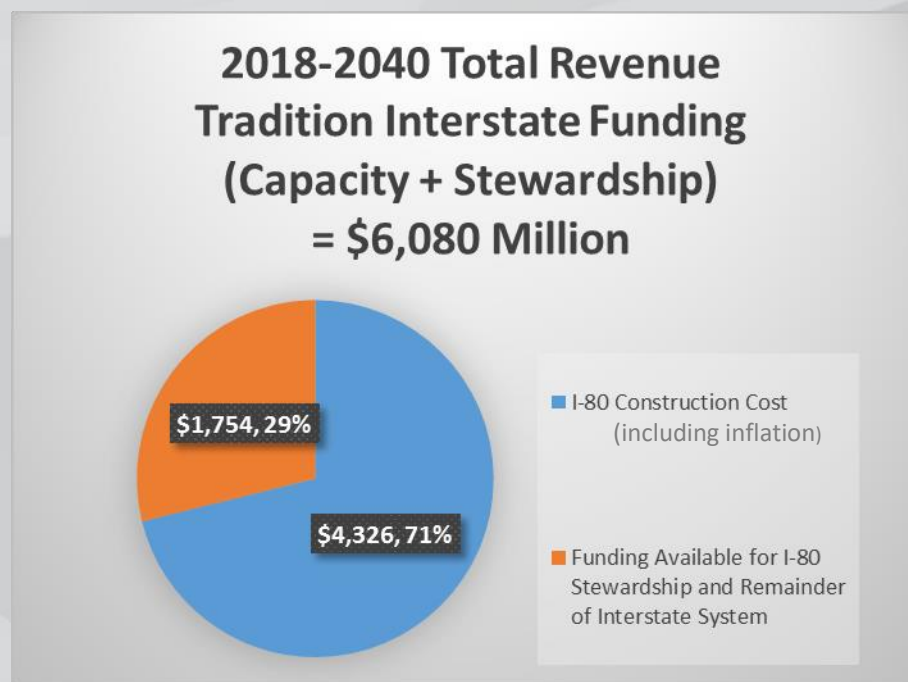


- 248 miles Full Reconstruction
- Wider Median and Shoulders – Safer and Easier to Maintain
- Modern (75 mph) and adaptable design
- Construction Cost = \$3,011M (2017)



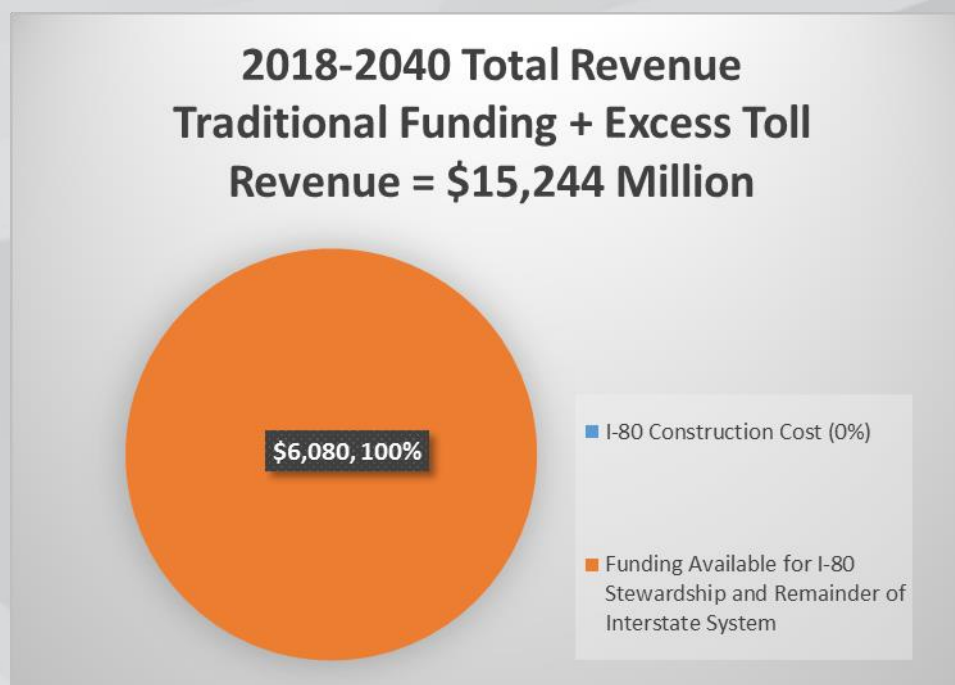
Implementing the New I-80 Vision (Pay-As-You-Go Funding)

- Construction Schedule – 2023-2040
- 18 years to complete



Implementing the I-80 Vision (Toll Funding)

- Construction Schedule – 2022-2026
- 5 years to complete



Comparing Funding Options for I-80 Vision

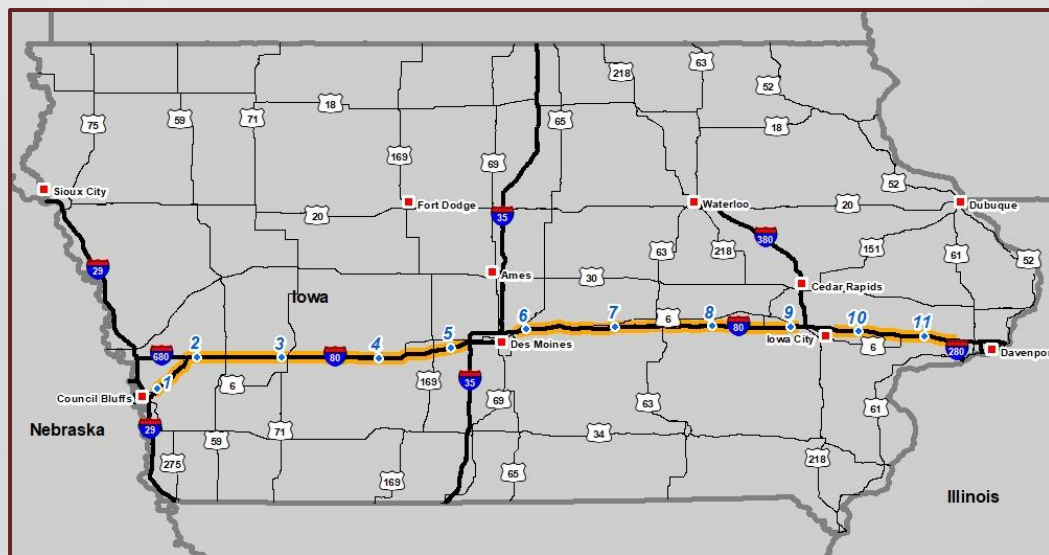
Item	Pay-As-You-Go Funding	Toll Funding
Construction Completed	2040	2026
Period of Construction	18 Years	5 Years
Cost (with Inflation)	\$4,326 million	\$3,861 million
Source of Construction Funding	Federal/State Funds	Toll Revenue Bonds
I-80 Maintenance Cost (2018-2050)	\$2,762 million	\$551 million
Travel, Safety and Economic Benefits	Full Benefit in 2041	Full Benefit in 2027
% of Existing Funds for Vision (2018-2040)	71%	0% *
Funding Available for Other Interstates (2018-2040) **	\$1,754 million	\$6,080 million

* Full financial feasibility would be determined through refinements in toll program costs, toll pricing, revenue and/or financing terms

** also for I-80 stewardship needs prior to reconstruction



Tolling Concept for I-80 Vision

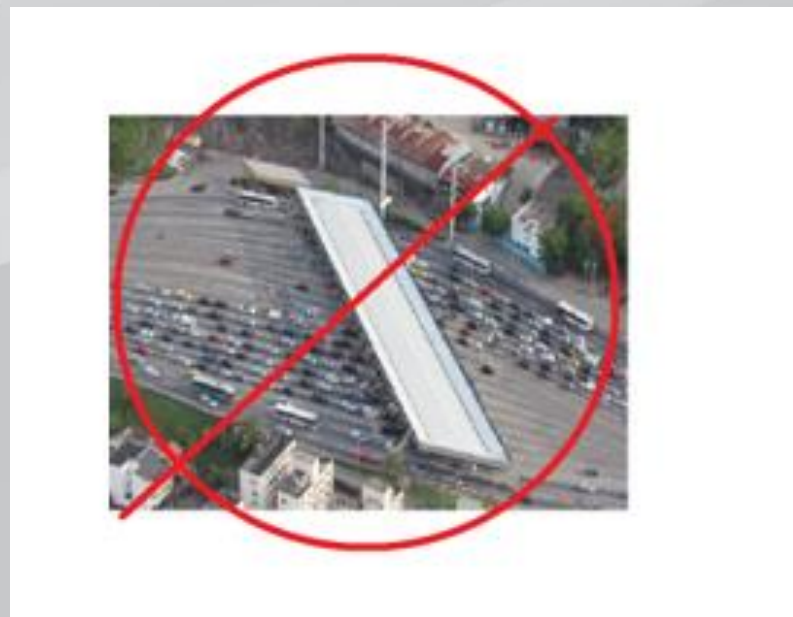
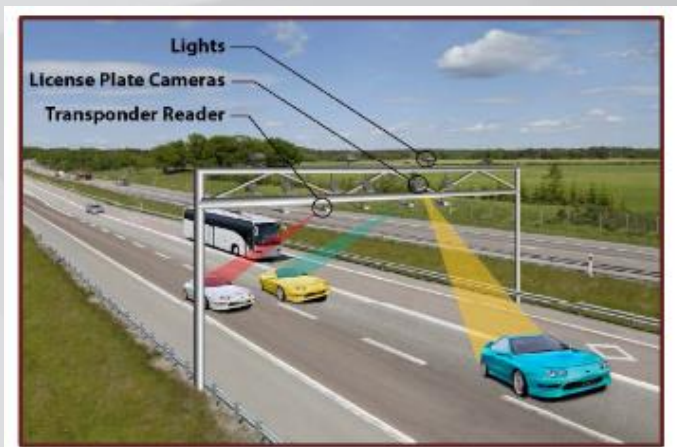


- Open Road Concept – Some Local Travel Toll-Free
- All Lanes Tolled – Rural Areas Only (248 miles)
- 11 Tolling Locations Across Iowa
- Customary Rural Interstate Toll Rates:
 - Auto = \$0.08/mile at opening (\$19.84 to cross Iowa)
 - Truck = \$0.24/mile at opening (\$59.52 to cross Iowa)



Electronic Toll Collection

**Transponders and License Plate Toll Collection:
No Cash Toll Plazas or Booths**



Financial Results

Financial Feasibility (Conceptual)

- Total Program Cost = \$3,861M
- Toll Financing Capacity = \$2,950M to \$3,610M
- % of Program Cost = 76% to 93%

Full financial feasibility would be determined through refinements in toll program costs, toll pricing, revenue and/or financing terms



Financial Results

Pledge net toll revenues (gross revenues minus operations and maintenance) to finance the upfront construction of the I-80 Vision.

Summary of Toll Financing Terms	
Sources of Financing	Toll revenue bonds and US DOT TIFIA loan
Repayment Sources	Net toll revenues with no State of Iowa funding or credit assistance
Debt-Service Coverage	Set at level intended to obtain 'A' rating
Final Maturity	35 years



Other Considerations - Benefits

Benefits of Toll Funding and Financing
Consistent and adaptable with likely future federal user fee policy
Provides new and sustained funding source for reconstruction and maintenance
Accelerates construction and opening to traffic to realize benefits sooner
Frees up existing federal and state funds for other priorities to benefit the whole state
Equitably aligns cost of travel with user impacts to system



Other Considerations - National Perspective

- New and Emerging Policy for Reinvesting in Rural Interstates – Toll Funding
- Current State Examples:
 - Oregon
 - Indiana
 - Others

President Trump Infrastructure Plan: Fact Sheet

“Tolling is generally restricted on interstate highways. This restriction prevents public and private investment in such facilities. We should reduce this restriction and allow the States to assess their transportation needs and weigh the relative merits of tolling assets.”



Other Considerations - Equity of Fee

Statewide	2007 VMT	Est. RUTF Revenue
Iowa Drivers	80%	87%
Out-of-State Drivers	20%	13%

TIME-21 Funding Analysis: Iowa DOT 2007 Report

I-80 Toll Corridor (248 mi.)	2015 VMT (Existing)	Est. Toll Revenue *
Iowa Drivers	76%	76%
Out-of-State Drivers	24%	24%

* Depends on Final Traffic and Revenue Forecasts – Customers Pay Per Mile Traveled

Governor's Transportation 2020: Citizen Advisory Commission:

- User fee concept is preserved, where those who use the roads pay for them, including nonresidents.
- Revenue-generating methods are fair and equitable across users.



Toll Implementation Challenges

- Authorization
 - No State Authority – requires State legislation
 - Federal Authority Limited – Interstate System Reconstruction and Rehabilitation Pilot Program (limited to 3 states)
- Change in Iowa Public Policy for Transportation
- Public and Stakeholder Perception and Acceptance
- Expedited Delivery, typically via Design-Build - not authorized in Iowa (require State legislation)
- Uncertainty of potential federal Infrastructure Plan and policy
- Traffic impacts of toll diversion
- Construction industry capacity for accelerated delivery



What questions did the Toll Financing Study answer?

- Is tolling financially feasible?
 - Yes, for 6-lane concept
- What would tolling look like?
 - All lanes tolled, open road concept
- What are the benefits?
 - I-80 could pay for itself, built quicker, open up capacity sooner, allow traditional funding to go to other priorities
- What are the challenges?
 - Changes in policy, public acceptance, plus others

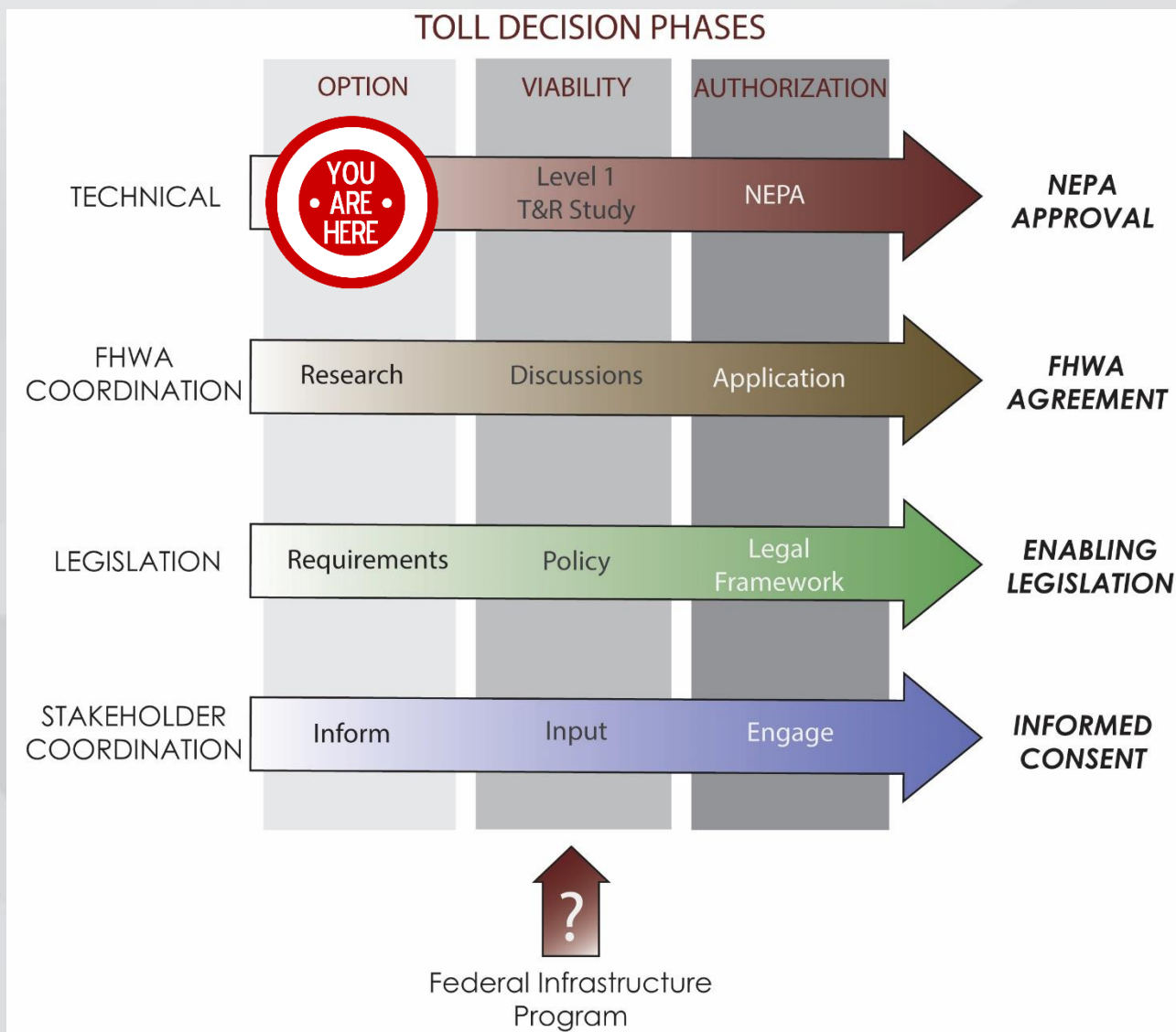


More questions....

- Is tolling a viable option for Iowa?
- Should tolling be considered further?
- Does tolling need to be decided now?
- Would all of I-80 need to be tolled at once?
- How do we engage stakeholders and the public?
- What are the next steps?



Overall Viability of Tolling Rural I-80



Next Steps

- I-80 PEL Toll Financing Study – publish technical memo in winter 2017/2018
- Continue technical analysis
- Stakeholder input
 - Trucking industry
 - Freight Advisory Council 12/1/2017
 - Public Information Meetings – spring 2018
- Recommendation at conclusion of I-80 PEL study



I-80 Toll Financing Study

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- ❖ Use the green Post-It Notes to write down your thoughts on the benefits (positives) of tolling and the orange Post-Its on the challenges or negatives of tolling.
- ❖ We'll collect the notes, group them and summarize the results.
- ❖ *At the break*, take the 4 stickers you have been provided & place the stickers next to the benefits and challenges you see as the most critical.

