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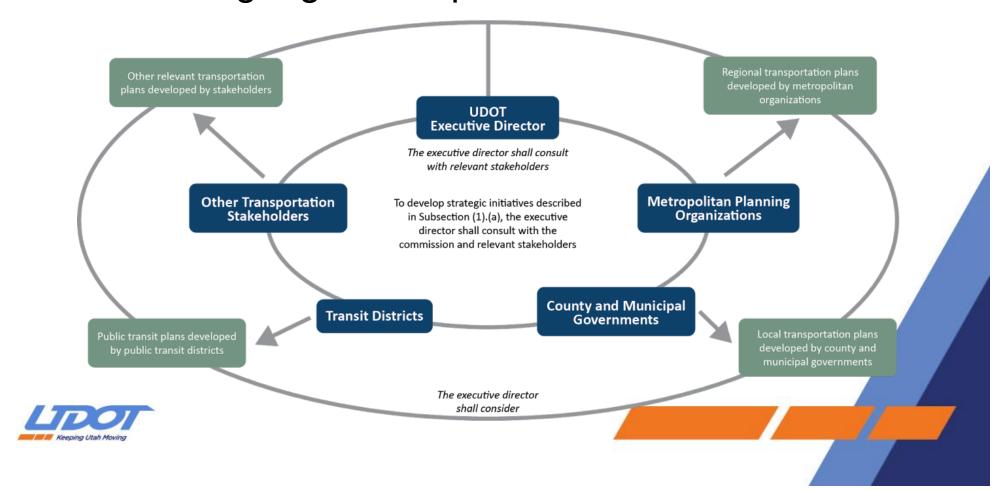
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# **Utah's Transportation Vision**



# S.B. 136 Language & Requirements

















































# UTAHS TRANSPORTATION WISION Pathway to Quality of Life





# Quality of Life in Utah

Well-Being in U.S., 2018

### **Highest Well-Being States**

- 1. Hawaii
- 2. Wyoming
- 3. Alaska
- 4. Montana
- 5. Utah
- 6. Colorado
- 7. Vermont
- 8. Delaware
- 9. South Dakota
- 10. North Dakota

Source: Witters, Dan. Hawaii Tops U.S. in Well-Being for Record 7th Time. Gallup News: Gallup National Health and Well-Being Index. February 2019.





# Growth is Challenging Out Quality of Life

# Utah Quality of Life Index

While year-to-year variation is small, the index has seen a decrease since 2013.



Source: Utah Foundation, Quality of Life Index, 2018



# What Improves Quality of Life?

# What could most improve your area as a place to live?

Respondents focus biggest improvements on transportation, housing affordability and air quality.

### **Improvements**

**Top 5 Responses** 

Reduce traffic

Improve affordability of housing

Improve air quality

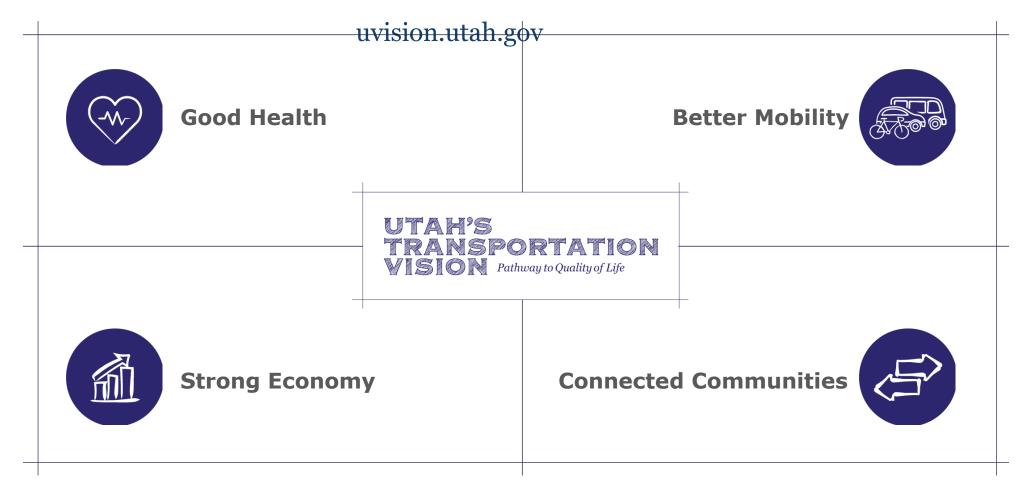
Improve roads and sidewalks (better condition, lighting)

Improve public transportation (more bus/train routes)

Source: Utah Foundation, Quality of Life Index, 2018



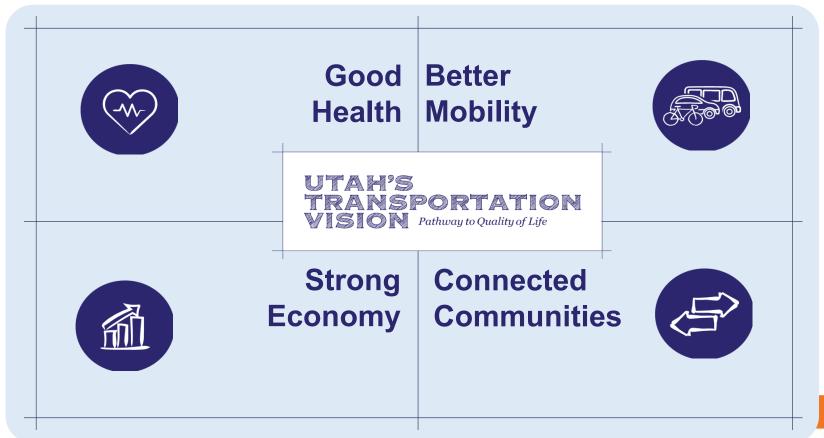
# Quality of Life Framework



# **Capacity Project Prioritization**



# Capacity Decision Framework



# Capacity Fund Decision Making

- Transportation Investment Fund (TIF)
  - Major source of capacity funding since 2005
  - Current prioritization process has continually evolved and improved
- Recently updated by SB 136, 72, and 34
  - Creates Transportation (TIF) and Transit (TTIF) fund
  - Expands type of eligible capacity projects with each fund
  - Introduces new decision factors and requirements
- Legislation requires written prioritization process
  - Process codified in Utah Administrative Rule
  - Further guidance provided through UDOT Policy updates

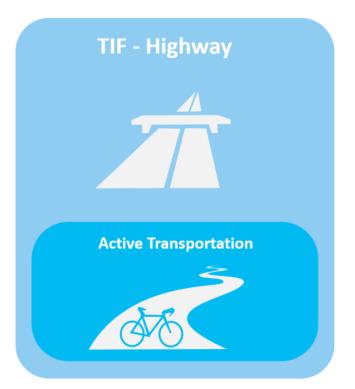


# Capacity Fund Decision Making

- Prioritization process must address
  - How statewide strategic initiatives are advanced
  - Weighted criteria system to rank projects
  - Provisions the Commission considers appropriate, which may include consideration of:
    - Regional and statewide economic development impacts (e.g. employment, educational facilities, recreation, commerce, and residential areas)
    - Extent to which local land use plans relevant to a project support statewide strategic initiatives



# **Capacity Programs**







# Capacity Decision Support Models

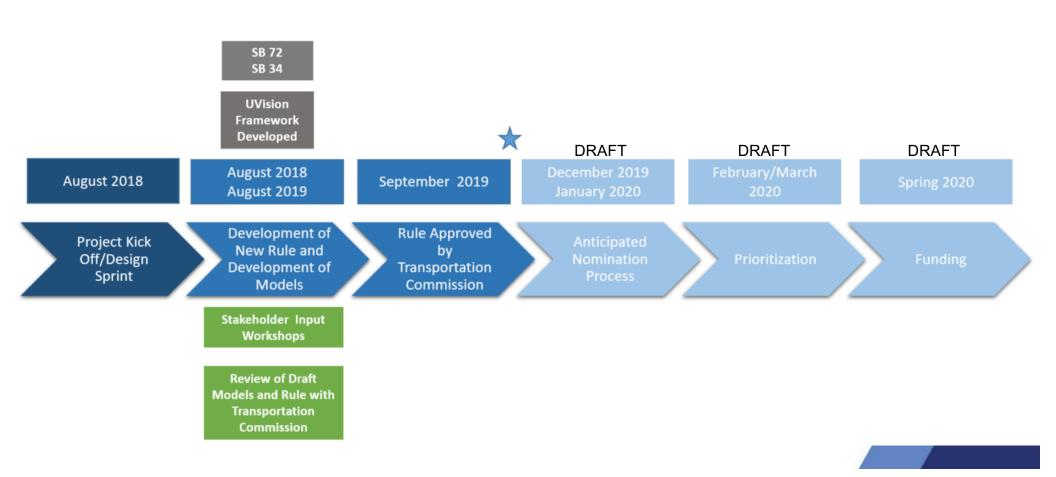


# **Prioritization Framework**

- Collaboratively developed with internal and external stakeholders
- Balances simplicity and complexity
- Addresses known issues with current decision model
- Compares across project types and geographies
- Shared framework enables future cross-asset evaluation
- Prepares for continual improvement and refinement

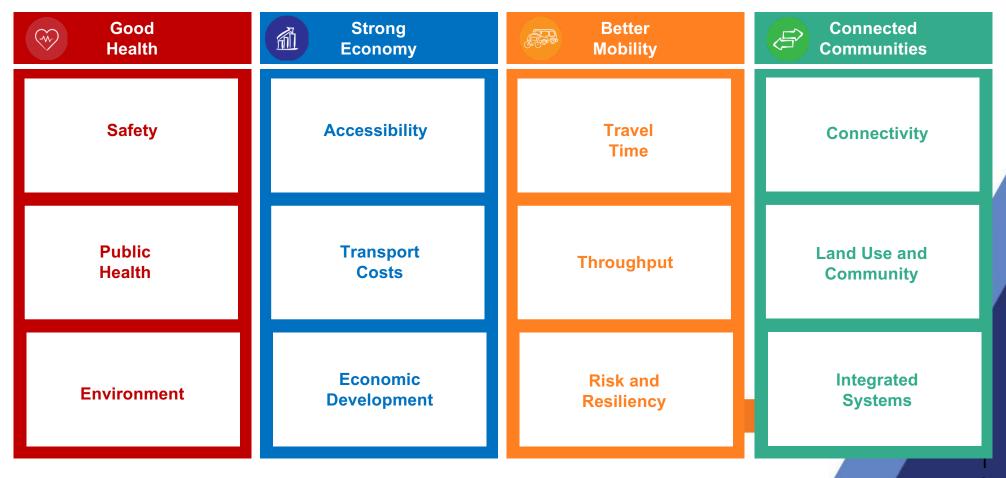


# Model Development Process



# Multimodal Framework





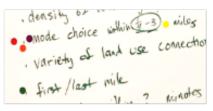


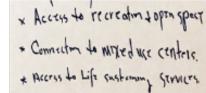
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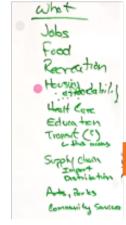
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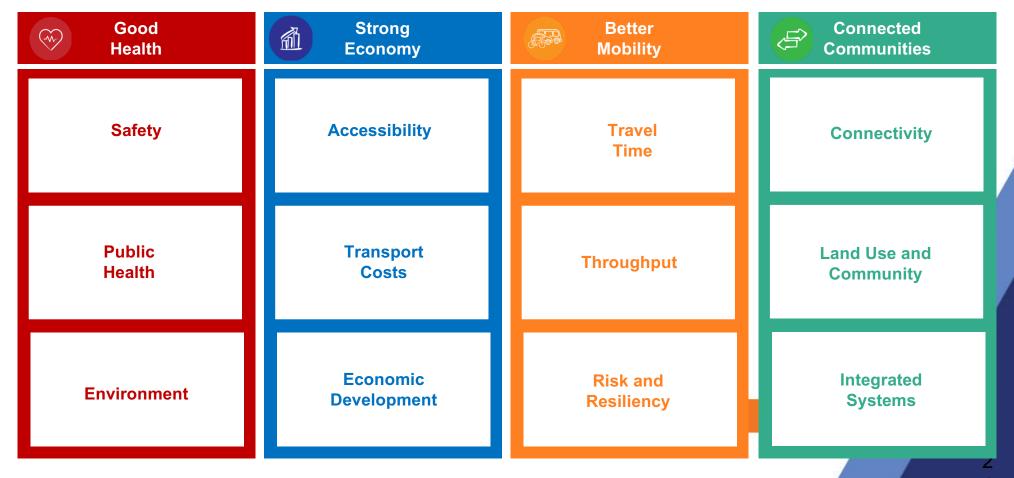


LEVEL OF SERVICE

TRAKL TIME

# Multimodal Framework





# Model and Scoring Methodology



Criteria remain the same across highway, transit,
 and other modes

**Throughput** 

**Risk and Resiliency** 





# Model and Scoring Methodology



### **Travel Time**

- TRANSIT Reliability component index (Y/N)
- HIGHWAY Existing Reliability (#)

### **Throughput**

- TRANSIT Estimated system ridership increase (#)
- HIGHWAY Relative volume by area type (#)

### **Risk and Resiliency**

 Address identified risk in state, regional or local plan (Y/N)



- Criteria remain the same across highway, transit,
   and other modes
- Measures may change depending on mode and models; some measures remain the same

# Model and Scoring Methodology



### **Travel Time**

Reliability by area type (#)

- ALPHA 1.35 = 4.4 pts
- BRAVO 0.94 = 2.6 pts
- CHARLIE 1.51 = 5.2 pts
- DELTA 0.36 = 0.01 pts
- ECHO 2.59 = 10.0 pts
- FOXTROT 1.31 = 4.3 pts

- Criteria remain the same across highway, transit,
   and other modes
- **Measures** change depending on mode and models
- Each measure normalized relative to projects being evaluated on a scale of 1-10





# **Decision Support Model Vision**

- V1.0 will be developed and ready for use in Fall of 2019
- Ongoing process of continual refinement with ongoing updates to data, methods, measures, approaches, and input





# Capacity Objectives – GOOD HEALTH

- SAFETY: Reward projects with potential to improve safety and security for all travelers
- **PUBLIC HEALTH:** Reward projects that improve public health
- ENVIRONMENT: Reward projects that enhance the environment





# Capacity Objectives – STRONG ECONOMY @

- **ACCESSIBILITY**: Reward projects located in closer proximity to educational facilities and recreational visitor destinations
- **TRANSPORT COSTS**: Reward projects that could reduce costs of transportation
- ECONOMIC DEVELOPMENT: Reward projects with connections to current and future job centers and targeted economic improvement or development areas





# Capacity Objectives – BETTER MOBILITY

- **TRAVEL TIME**: Reward projects resulting in improvements in travel time and reliability
- **THROUGHPUT**: Reward projects increasing the capacity of key corridors to move people and goods
- RISK AND RESILIENCY: Encourage projects that address identified risks, enhance resiliency, or provide redundant travel routes





# Capacity Objectives – CONNECTED COMMUNITIES (2)

- **CONNECTIVITY**: Reward projects likely to meet needs of future population centers
- **LAND USE**: Reward projects consistent with state, regional, and local plans
- **INTEGRATED SYSTEMS**: Reward projects with elements that improve multimodal access and connectivity





# What Makes a Good Measure?







# What Makes a Good Measure?

Preferred

VS

Outcome Based

Quantitative

Continuous

Problem Based

Qualitative

Binary



# What Makes a Good Measure?

### Other Considerations:

- Statewide application
- Accommodates a variety of project types
- Differentiates projects
- Reliable source
- Update cycle
- Complexity vs Value









# TIF Highway Model

**DRAFT - REVISED SEPTEMBER 13, 2019** 



55%

30%

(8)	Good Health	25%
	Safety	60%

- UDOTUSRAP Star Rating (#)
- UDOT Safety Index (#)
  - Public Health 20%
- Active transportation component (Y/N)
  - **Environment** 20%
- Environmental Improvement (Y/N)



### Accessibility

 Connectivity to education and tourism destinations

### **Transport Costs** 20%

Truck percentage (#)

### **Economic Development 45%**

- Current job destinations (#)
- Future employment growth (#)
- Transportation
   Reinvestment Zone or Other
   Outside Funding Source for
   Project (Y/N)



#### **Travel Time**

- Existing reliability (#)
- Delay (#)

35%

### Throughput

- Existing volume (#)
- Future volume (#)

### Risk and Resiliency 15%

Adds redundancy (Y/N)



#### Connectivity

35%

Future population growth (#)

### Land Use and Community 35%

 Solutions Development or Access Management (Y/N)

### Integrated Systems 30%

Transit component (Y/N)



## TIF Active Model

DRAFT - REVISED SEPTEMBER 16, 2019





### Safety 60%

- Non-motorized crash trends (#)
- Project safety component index (Y/N)

### Public health 20

Percent of population physically inactive (#)

### **Environment** 20%

- Air quality designation (#)
- Environmental feature index (Y/N)



# Strong 20% Economy

#### Accessibility

40%

40%

 Connectivity to education and tourism destinations (#)

#### **Transport costs**

 Percent of workforce living and working within project area (#)

### Economic development 20%

- Current employment
- Future employment growth (#)
- Connections to TRZ and local economic development areas (Y/N)

# Better 40% Mobility

#### Reliable travel time

 Travel time component index (Y/N)

### Throughput

- Active transport demand (#)
- Level of Traffic Stress Score and Project Element Index (#)

### Risk and resiliency 25%

 System redundancy index (Y/N)

# Connected 15% Communities

#### Connectivity

- Percent of workers commuting by non-SOV modes (#)
- Future population growth (#)
- Accessibility for low-income households (#)

#### 25%

60%

### Land use and community

Local plan consistency (Y/N)

### Integrated systems 15%

 Number of bike routes and transit stops that the project connects to (#)

# TTIF Transit Model



40%

20%

Safety 35%

Safety component index (#)

**Public Health** 20%

 Percent of population physically inactive (#)

> Environment 45%

Air quality designation (#)

 Connectivity to education and tourism destinations (#)

Accessibility

**Transport Costs** 

 Commute costs as percent of household income (#)

**Economic Development 40%** 

- Current job destinations (#)
- Future employment growth (#)
- Connections to TRZ and local economic development areas (Y/N)

 Reliability component index (Y/N)

**Travel Time** 

50%

**Throughput** 

 Estimated system ridership increase (#)

Risk and Resiliency

 Address identified risk in state, regional or local plan (Y/N)

Communities

50%

35%

Connectivity Future population growth (#)

 Accessibility for low-income households (#)

Land Use and Community

 Regional and local plan consistency (Y/N)

Integrated Systems 15%

Project includes an active transportation component or is part of highway project (Y/N)





# TTIF First/Last Model

줿



40%

40%

20%



#### Safety 60%

- Non-motorized crash trends (#)
- Project safety component index (Y/N)

### Public health 20%

 Percent of population physically inactive (#)

### Environment

- Air quality designation (#)
- Environmental feature index (Y/N)



### Accessibility

Strong

**Economy** 

 Connectivity to education and tourism destinations (#)

#### Transport costs

Percent of workforce living and working within project area (#)

### Economic development 20%

- Current employment
- Future employment growth by area type (#)
- Connections to TRZ and local economic development areas (Y/N)

#### 40% **Better Mobility**

#### Reliable travel time

30%

 Travel time component index (Y/N)

### **Throughput**

 Ridership of transit stations served(#)

### Risk and resiliency

 System redundancy index (Y/N)

#### 15% Connected **(F)** Communities

#### Connectivity

- Percent of workers commuting by non-SOV modes (#)
- Future population growth (#)
- Accessibility for low-income households (#)

#### 25%

60%

### Land use and community

25% Local plan consistency (Y/N)

### Integrated systems 15%

 Number of bike routes and transit stops that the project connects to (#)



# New Transportation Capacity Project Prioritization Process Document

New Transportation Capacity Project Prioritization Process

Version 1.0
Utah Transportation Commission Approval Pending



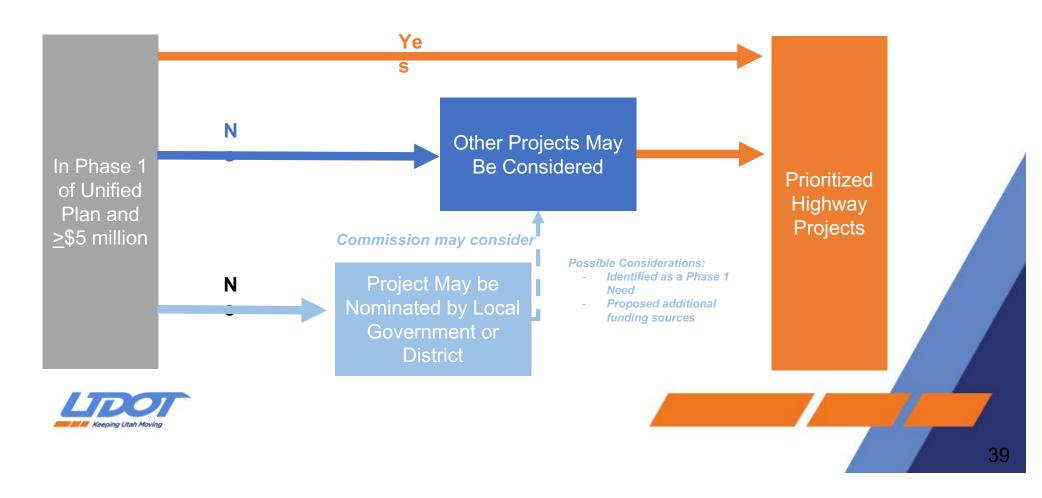
udot.utah.gov/go/projectprioritizationprocess





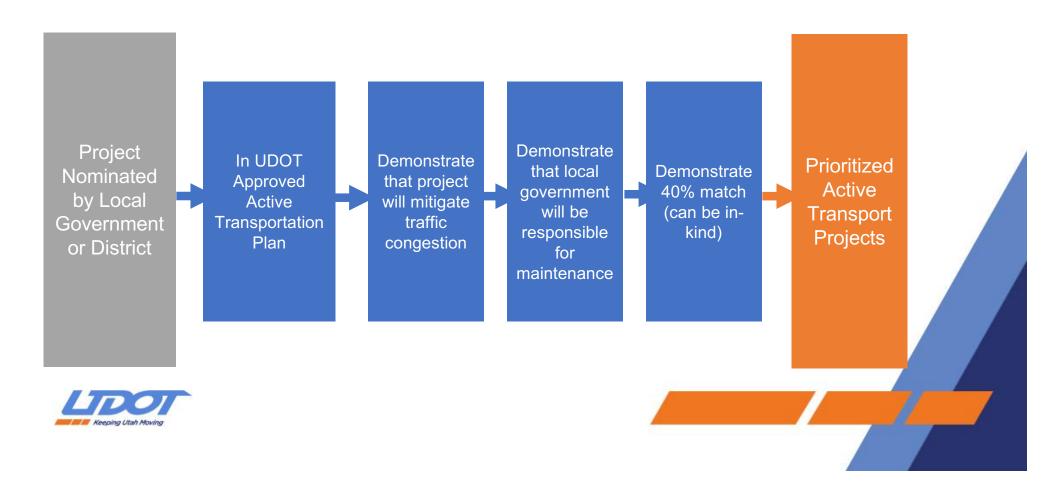
# **Draft TIF Highway Process**





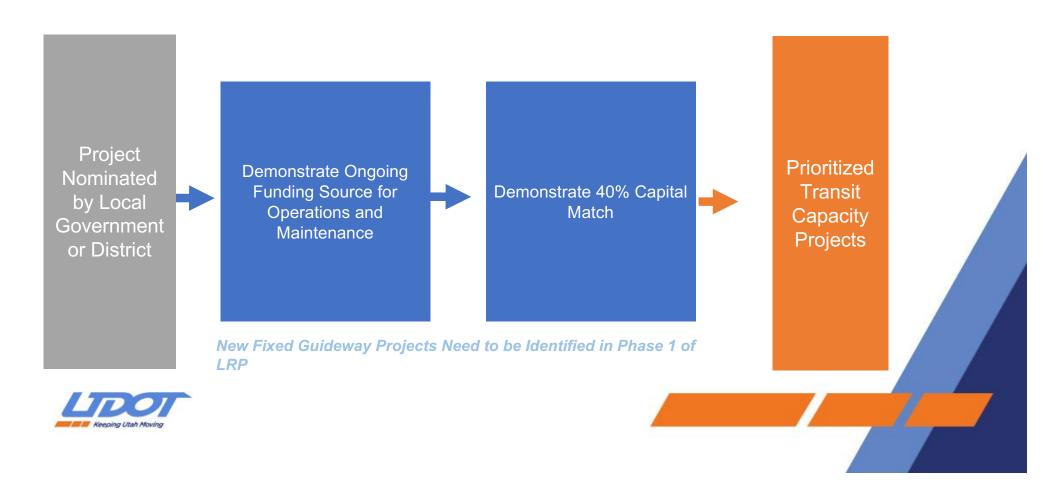
# **Draft TIF Active Process**



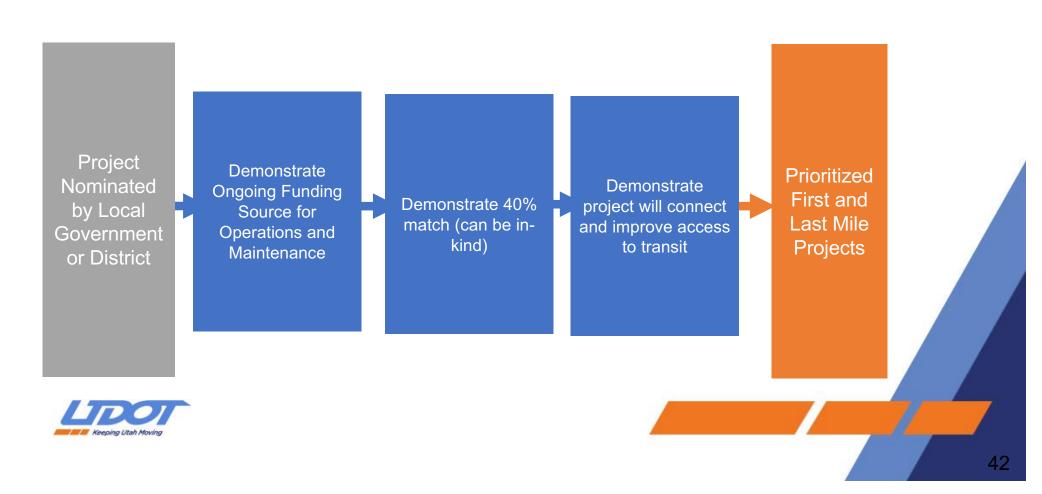




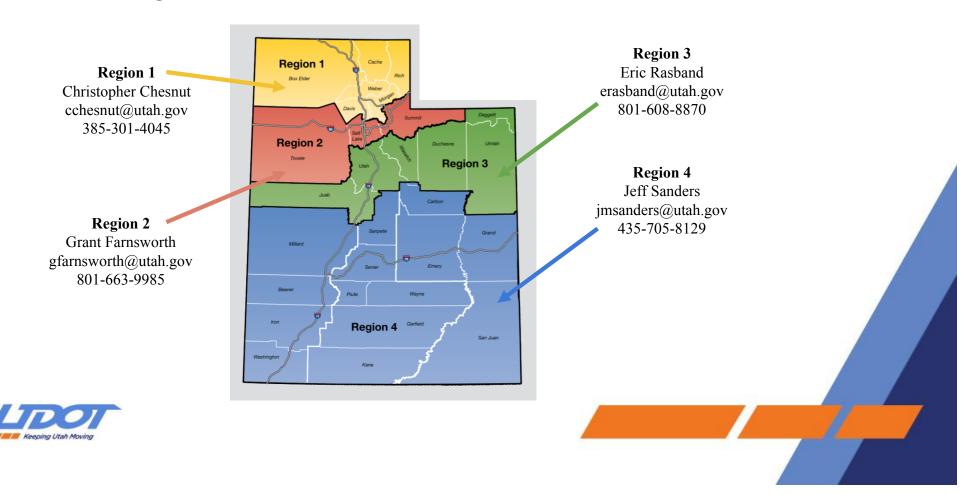




# **Draft TTIF First/Last Process**



# **UDOT Region Planners**



# QUALITYOFLIFE



