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Carlos Bracerias  
Utah Department of Transportation

Dawn Ramsey  
Utah League of Cities & Towns

Lorene Kamalu  
Utah Association of Counties

Ari Bruening  
Envision Utah

Laura Hanson  
State Planning Coordinator

Andrew Gruber  
Executive Director

## REGIONAL GROWTH COMMITTEE AGENDA

August 19, 2021

A meeting of the Regional Growth Committee will be held on **Thursday, August 19, 2021 at 9:45 am via Zoom.**

<https://us02web.zoom.us/j/86924025919?pwd=N0lpNlZaSDdVOXBGNdlwVUZ2ZURxZz09>  
Meeting ID: 869 2402 5919 Passcode: 130185 One tap mobile +16699009128,,86924025919#

The agenda will be as follows:

- 1. Introductions and consent agenda**  
**ACTION:** Minutes of the RGC Meeting held May 20, 2021
- 2. Public comment**
- 3. Statewide Growth Policy Conversations and Wasatch Choice**
- 4. Discuss the Wasatch Choice fall outreach opportunities**
- 5. Regional Transportation Plan (RTP) amendments**
  - a. **ACTION:** RTP amendment process update
  - b. **ACTION:** Amendment #3 to the 2019-2050 RTP
- 6. WFRC Funding Opportunities for Local Governments**
- 7. Other Business and Adjournment**  
Next RGC meeting: October 21, 2021

### Upcoming Events:

- *WFRC Council Meeting, August 26, 2pm*
- *Joint Policy Advisory Committee Meeting, Sept 2, 11:30am*
- *WFRC Active Transportation Meeting, Oct 13, 9:45am*
- *Wasatch Front Economic Development District Meeting, Oct 27, 1:30pm*
- *ULCT Conference, September 28 to October 1*
- *Wasatch Choice Workshops, October 12 to November 22*

Informational materials can be located on WFRC's website at [www.wfrc.org](http://www.wfrc.org).

*Wasatch Front Regional Council is an Equal Opportunity program. Public participation is solicited without regard to age, sex, disability, race, color or national origin. Auxiliary aids or translation services are available upon request by contacting WFRC's Title VI Administrator. Call 801-363-4250 (hearing impaired individuals may use Relay Utah by dialing 711) or email [apearson@wfrc.org](mailto:apearson@wfrc.org) at least 72 hours in advance.*

*Wasatch Front Regional Council is choosing to continue holding all public meetings electronically, without an anchor location, until it is deemed safe enough to hold public meetings in person.*

*Wasatch Front Regional Council es una organización de Oportunidad Igual. Se solicita la participación del público, sin importar la edad, el sexo, la discapacidad, la raza, color o nacionalidad. Personas que requieren servicios de traducción deben contactar al Administrador de Título VI de WFRC por teléfono a 801-363-4250 (personas con discapacidad auditiva pueden llamar a Spanish Relay Utah - 1-888-346-3162) o por correo electrónico [apearson@wfrc.org](mailto:apearson@wfrc.org), por lo menos 72 horas antes de la reunión.*

*Wasatch Front Regional Council ha elegido seguir manteniendo todas las juntas públicas electrónicamente, sin un lugar de anclaje, hasta que sea considerado lo suficientemente seguro para tener juntas públicas en persona.*



# WASATCH FRONT REGIONAL COUNCIL

## DRAFT MINUTES Regional Growth Committee May 20, 2021

A meeting was held on Thursday, May 20, 2021, via Zoom connection, due to the safety restrictions put in place by the Utah Governor's Office, in response to continuing COVID-19 concerns.

The following were present:

MEMBERS AND ALTERNATES PRESENT		OTHER APPOINTED MEMBERS AND ALTERNATES	
Tyler Vincent, Member (Brigham City)	no	Natalie Gochmour, Member Utah Transportation Commission	no
Jeff Scott, Alternate (Box Elder County)	no	Kevin Van Tassell, Alternate Utah Transportation Commission	yes
Len Arave, Member (North Salt Lake)	yes	Beth Holbrook, Member Utah Transit Authority Board of Trustees	yes
Rick Earnshaw, Alternate (Woods Cross)	no	Carlton Christensen, Alternate Utah Transit Authority Board of Trustees	no
Joy Petro, Member (Layton)	no	Erin Mendenhall, Member Utah Air Quality Board	Jon Larsen in her stead
John Pohlman, Alternate (Fruit Heights)	no	Ari Bruening, Member Envision Utah	no
Robert McConnell, Member (Morgan County)	yes	Ryan Beck, Alternate Envision Utah	yes
Matt Wilson, Alternate (Morgan County)	no	<b>NON-VOTING MEMBERS AND ALTERNATES PRESENT</b>	
Jenny Wilson, Member (Salt Lake County)	yes	Ben Huot, Member Utah Department of Transportation	yes
Ron Bigelow, Alternate (West Valley City)	yes	Andrea Olson, Alternate Utah Department of Transportation	yes
Dawn Ramsey, Member (South Jordan) <b>Chair</b>	yes	GJ LaBonty, Member (Interim) Utah Transit Authority	yes
Richard Snelgrove, Member (Salt Lake County)	no	Kerry Doane, Alternate Utah Transit Authority	no
Troy Walker, Member (Draper)	no	Bryce Bird, Staff Representative Utah Air Quality Board	yes
Steven Shields, Alternate (Herriman)	yes	Ivan Marrero, Member FHWA-Utah Division	no
Dan Peay, Alternate (Magna)	no	Kelly Lund, Alternate FHWA-Utah Division	no
Cherie Wood, Alternate (South Salt Lake)	no	Gary Uresk Utah League of Cities and Towns	yes
Kurt Bradburn, Alternate (Sandy)	no	Dina Blaes Utah Association of Counties	yes
Kendall Thomas, Member (Tooele County)	no	Julie Fullmer, Vineyard Mayor Mountainland Association of Governments	no
Ed Hansen, Alternate (Tooele City)	no	<b>WFRC APPOINTMENTS FROM OTHER ORGANIZATIONS</b>	
Mark Allen, Member (Washington Terrace)	yes	Ibi Guevara, Utah Urban Lands Institute	Robert Schmidt in her stead
Norm Searle, Alternate (Riverdale)	yes	Laura Hanson, GOPB	yes
Robert Dandoy, Member (Roy) <b>Vice Chair</b>	yes	Jacey Skinner, Utah Transportation Coalition	yes
Jim Harvey, Alternate (Weber County)	yes	Reid Ewing, University of Utah	yes

OTHER ATTENDEES PRESENT, including WFRC Staff:	
Bret Millburn, Ginger Chinn, Patti Garver, Jory Howell,	WFRC: Andrew Gruber, Ted Knowlton, Andrea Pearson,
Christopher Chesnut, Bill Baranowski, Shule Bishop,	Jory Johnner, Hugh Van Wagenen, Mikala Jordan,
Nichol Bourdeaux, Grant Farnsworth, Nate Peterson,	Megan Townsend, Hannah Boettcher, Miranda Jones Cox,
David Larson, Rob Jolley	Rosie Hernandez, Julie Bjornstad, Lauren Victor, Nikki Navio
	Badr Almadhi, Nicole Mendelsohn, Ben Wuthrich,
	Kurt Mower, Ned Hacker, Bill Hereth, Bert Granberg

**1. Introductions and Consent Agenda [00:00:05]**

Mayor Dawn Ramsey called the meeting to order at 9:45am. Introductions were made via roll call. Laura Hanson, with the Governor's Office of Planning and Budget, GJ LaBonty, with UTA, and Ginger Chinn, with the Salt Lake Chamber, were welcomed to the meeting.

**ACTION: Approve Minutes from March 18, 2021 [00:02:10]**

With no discussion or changes noted, Mayor Ramsey entertained a motion to accept the minutes. A motion was made by Mayor Len Arave, and seconded by Mayor Robert Dandoy that the Minutes be approved. Motion passed unanimously.

**2. Public Comment [00:06:31]**

Mayor Ramsey opened the meeting for public comments. There were none.

**3. Wasatch Choice - the 2023-2050 Regional Transportation Plan (RTP) [00:06:59]**

Ted Knowlton and Hugh Van Wagenen, both with WFRC, presented key plan objectives of the RTP, which is the transportation component of the overall Wasatch Choice Vision, and a part of Utah's Unified Transportation Plan. Mr. Knowlton and Mr. Van Wagenen revisited the objectives of the RTP, and sought feedback from the RGC, as a steering committee, on the overall regional transportation planning process. Mr. Knowlton and Mr. Van Wagenen then facilitated a discussion of key focus areas of the RTP: improving the Region's resilience in the face of rapid growth, recovery from COVID-19, and new external forces such as rapidly shifting transportation technologies and behaviors. Polls were presented to the group during this discussion, and the results are below.

**4. ACTION: Amendment #3 to the 2019-2050 RTP [00:40:01]**

Jory Johnner and Julie Bjornstad, both with WFRC, presented the proposed Amendment Number 3 to the 2019-2050 Regional Transportation Plan (2019-2050 RTP). Project amendments are organized into three levels: *Level 1 - Staff modifications*, which include minor adjustments; *Level 2 - Board Modifications*, where action is requested to make a formal adoption of the projects and; *Level 3 - Full Amendment*, where action is requested to release these projects for public comment. The projects within this amendment were presented to their respective Technical Advisory Committees (TACs) on April 28, 2021 and will also be presented to the Box Elder, Weber, Davis and Salt Lake County Councils of Governments (COGs). Ms. Bjornstad and Mr. Johnner briefly discussed each project. [01:16:48] Mayor Ramsey asked if there were any members of the public that would like to have their comments noted. With no comments stated, Mayor Ramsey made a motion to approve the Level 2 - Board Modification projects and release the Level 3 - Full Amendment projects and the air quality conformity determination as found in Draft Air Quality Memorandum 40 for public comment for Amendment Number 3 to the 2019-2050 RTP. The motion was seconded by Commissioner Jim Harvey, and the vote was unanimous in the affirmative.

**5. ACTION: Point of the Mountain Transit Locally Preferred Alternative [01:20:05]**

Mayor Ramsey turned the time to Utah Transit Authority Trustee Beth Holbrook, for a report on the Point of the Mountain Transit Study, which began in 2019 as a partnership of local governments and agencies, including WFRC, with the intent to explore transit corridor improvements in Utah's fastest

growing areas of southern Salt Lake County and northern Utah County. Information presented by Patti Garver, UTA, summarized the purpose of this study, which was to identify a Preferred Alternative, named the Common Ground Segment, that meets the needs of the proposed land use and communities in the area. The action requested is a vote of approval and support of this Locally Preferred Alternative in preparation for the upcoming environmental phase of the project.[01:40:00] Mayor Len Arave made a motion to approve the Common Ground Segment as the Locally Preferred Alternative, which was seconded by Commissioner Robert McConnell. The affirmative vote was unanimous.

#### 6. Other Business [01:42:14]

The next meeting is scheduled for August 19, 2021.

#### 7. Adjournment [01:43:10]

With no other business brought before the group, Mayor Ramsey entertained a motion to adjourn the meeting. A motion was made by Reid Ewing, University of Utah, and seconded by Beth Holbrook, UTA Trustee, that the meeting adjourn. Motion passed unanimously, and the meeting adjourned at 11:28am.

*A recording of this meeting, as well as meeting materials, may be found on the WFRC website at [www.wfrc.org](http://www.wfrc.org)*

### Polling 1: Managed Lanes

Polling is closed

31 voted

#### 1. Regarding the Managed Lanes approaches



## Polling 2: Fare Free Transit



Polling is closed

29 voted

### 1. Regarding Fare Free Transit



## Polling 3: Congestion Pricing



Polling is closed

28 voted

### 1. Regarding the concept of Congestion Pricing

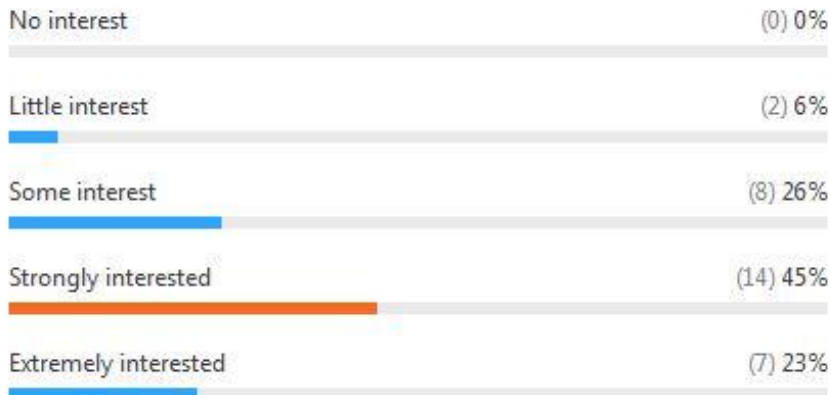


## Polling 4: Street Connectivity

Polling is closed

31 voted

### 1. On a scale of 1 to 5, approximate how much interest communities might have in improving Street Connectivity

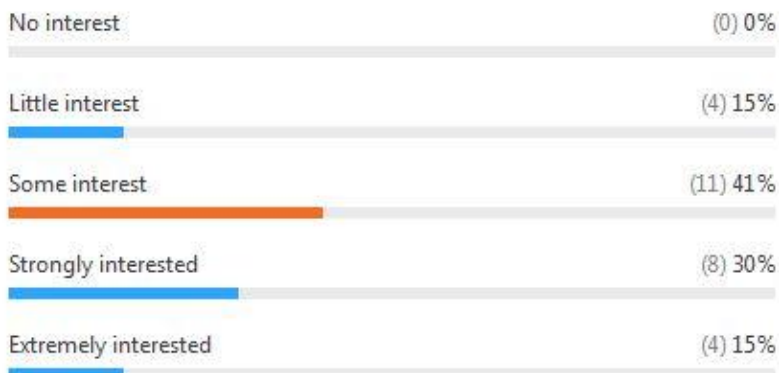


## Polling 5: Curbside Management

Polling is closed

27 voted

### 1. On a scale of 1 to 5, approximate how much interest communities might have in exploring new Curbside Management approaches



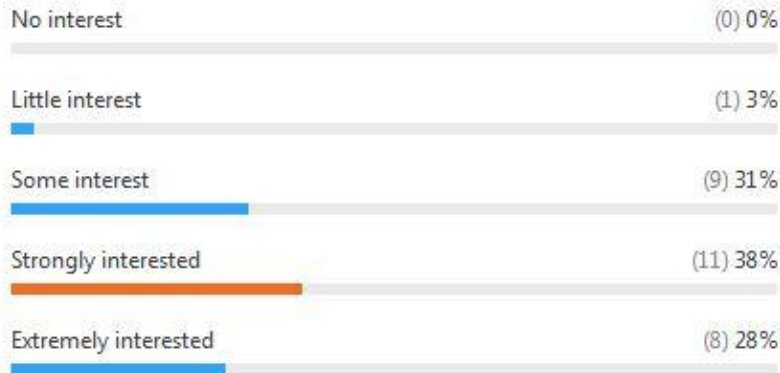
## Polling 6: Local Street Design Modifications



Polling is closed

29 voted

### 1. On a scale of 1 to 5, approximate how much interest communities might have in exploring Local Street Design Modifications



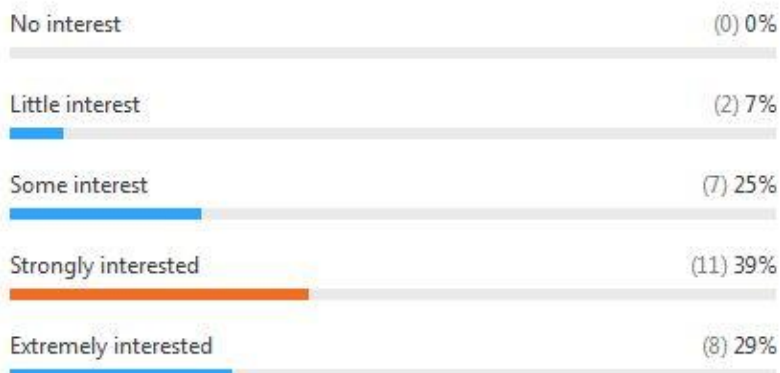
## Polling 7: Parking Modernization



Polling is closed

28 voted

### 1. On a scale of 1 to 5, approximate how much interest communities might have in exploring Parking Modernization



**DATE:** August 12, 2021  
**AGENDA ITEM:** 3  
**SUBJECT:** **Statewide Growth Policy Conversations and Wasatch Choice**  
**PREPARED BY:** Ted Knowlton

At the August 19th meeting, the Regional Growth Committee (RGC) will discuss policy concepts for consideration by two state commissions - the [Economic Opportunity Commission](#) and the [Commission on Housing Affordability](#).

While the two commissions are working on different core issues they both are exploring how improvements can be made via coordination with other planning elements such as infrastructure, housing, economic development, and open space. The alignment between these issues has been at the heart of the work of WFRC and is embodied in the Wasatch Choice Regional Vision.

**BACKGROUND:**

The [Wasatch Choice](#) Regional Vision is our shared framework to prepare our communities and region to address the challenges of growth as well as the recovery from COVID-19. It coordinates regional transportation planning with local land use and economic development efforts. The regional transportation element of Wasatch Choice is the officially adopted [Regional Transportation Plan](#).

**RECOMMENDATION:**

This item is for information only.

**CONTACT PERSON:**

Ted Knowlton, WFRC 801-425-3534, [ted@wfrc.org](mailto:ted@wfrc.org)

**DATE:** August 12, 2021  
**AGENDA ITEM:** 4  
**SUBJECT:** Wasatch Choice Fall Outreach Opportunities  
**PREPARED BY:** Julie Bjornstad

At the RGC meeting, WFRC staff will outline and seek feedback on this fall's planned Wasatch Choice workshops. These workshops are the next big step in development of the Regional Transportation Plan (the transportation element of the Wasatch Choice Regional Vision). The key objective for these events is developing the "preferred scenario" of transportation projects in the 2023-2050 Regional Transportation Plan.

## **BACKGROUND:**

WFRC, the Utah Department of Transportation (UDOT), and the Utah Transit Authority (UTA) are hosting the workshops this fall to update the [Wasatch Choice Regional Vision](#), a collaborative effort of communities and many other [partners](#) over the past few years. These workshops are specifically designed for local government leaders - mayors/commissioners, council members, planning commissions, and key staff.

Key workshop discussions are anticipated to include:

- Feedback and input on road, transit, and active transportation projects needed now or in the coming decades;
- Changes to communities and transportation behavior that may arise from new technologies, the legacy of the pandemic, and other disruptive forces; and
- How transportation projects, land uses, and economic development can be more responsive to these disruptive forces.

The proposed dates for the Wasatch Choice workshops are:

- Tuesday, October 12 - Box Elder County
- Monday, October 18 - Southern Weber County
- Tuesday, October 19 - Northern Weber County
- Monday, October 25 - Southwestern Salt Lake County
- Monday, November 1 - Northern Salt Lake County
- Monday, November 15 - North Davis County
- Wednesday, November 17 - Southeastern Salt Lake County
- Monday, November 22 - Southern Davis County
- TBD - Tooele County
- TBD - Morgan County

WFRC coordinates the [Wasatch Choice Regional Vision](#) and the Regional Transportation Plan (RTP) planning process, which is updated and adopted every four years. This planning process looks several decades into the future to anticipate needed transportation investments. The current four-year planning cycle began in 2019 and will be completed in 2023, leading to the adoption of the [2023-2050 RTP](#). The RTP informs, and is the transportation element of, the Wasatch Choice Regional Vision. Numerous partners are involved in the development of the RTP and the Regional Vision, including local counties and cities, Mountainland Association of Governments (MAG), UDOT, and UTA, along with

other agencies, stakeholders, and the public.

**RECOMMENDATION:**

This item is for information only.

**CONTACT PERSON:**

Julie Bjornstad, WFRC 801-425-3534, [julieb@wfrc.org](mailto:julieb@wfrc.org)

**DATE:** August 12, 2021  
**AGENDA ITEM:** 5a  
**SUBJECT:** **ACTION: RTP Amendment Process Update**  
**PREPARED BY:** Jory Johner

At the August 19 Regional Growth Committee (RGC) meeting, the Wasatch Front Regional Council (WFRC) staff will outline two proposed modifications to the Regional Transportation Plan (RTP) amendment process.

In summary, two changes are proposed:

1. When WFRC amends the RTP, WFRC staff consults with the Federal Highway Administration (FHWA) about the amendment. However, the written RTP Amendment Process does not reflect that consultation. The proposed modification to the process would codify that the consultation is required to occur.
2. Changes to Wasatch Choice "Centers" are currently listed as "Level 2" amendments, requiring action by RGC. The proposed modification to the process would provide more flexibility by making changes to these centers "Level 1" amendments, made by staff in consultation with the affected communities.

#### **BACKGROUND:**

Every four years WFRC prepares and adopts the RTP as the core transportation plan within the overall Wasatch Choice Regional Vision. While the RTP receives considerable review before being formally adopted, changes are sometimes needed to accommodate new funding sources or conditions.

WFRC has a written RTP amendment process that was last adopted by the Regional Council in March 2020.

The particular process used to make an amendment to the RTP varies depending on the size and impact of a potential project. There are three different levels or types of amendments:

- *Level 3* - Full Amendment addresses changes to regionally significant projects, such as principal arterials, freeways, or fixed guideway transit. This category requires a 30-day public comment process and an air-quality conformity analysis.
- *Level 2* - Board Modification addresses projects larger than \$10 million that are not considered regionally significant. The Level 2 category streamlines the process by requiring amendments to be considered at one, rather than two, RGC and RGC TAC meetings. It also allows for the public comment period during the RGC meeting and allows the RGC to approve the amendment during the meeting. RGC does have the opportunity to elevate a Level 2 project to Level 3, requiring the standard 30-day comment period.
- *Level 1* - Staff Modification addresses minor projects such as road improvements less than \$10 million, corridor preservation, or bus improvements. Level 1 amendments require consultation with the RGC Chair and Vice-chair. The RGC Chair and Vice-chair does have the opportunity to elevate a Level 1 project to Level 2.

#### **PROPOSED MODIFICATIONS:**

##### Proposed process modification 1: Consultation with FHWA

When there is a need to amend the RTP, WFRC staff makes an initial determination of which level of amendment is required, depending on the nature of the project. WFRC consults with FHWA -- as our primary cognizant federal agency -- in making that determination, and also asks for other input or feedback from FHWA. However, the written RTP amendment process does not currently reflect that consultation. The proposed modification to the RTP amendment process would codify this consultation as a required step in the process.

This proposed modification has been discussed with and was requested by FHWA.

Proposed process modification 2: more flexibility in adjusting assumed land use in “centers”

WFRC staff recommends that changes to Wasatch Choice Regional Vision land use centers be a “Level 1” rather than a “Level 2” modification, so formal action by RGC would not be required. This would allow a more flexible and responsive process as WFRC works with local communities in the region. Changes to centers would be reviewed by WFRC staff in consultation with the affected local community (or communities). After dialogue with the community, these changes would require approval by the WFRC Executive Director in consultation with the RGC Chair and Vice-Chair; the RGC Technical Advisory Committees (TACs) and the RGC would be informed of the changes. The changes could be elevated to Level 2, meaning action would be taken by RGC, based on factors including potential impacts, professional judgment, or lack of consensus.

**RECOMMENDATION:**

The WFRC staff requests that the Regional Growth Committee make a motion to *“recommend that the Wasatch Front Regional Council approve the modified process for amending the Regional Transportation Plan.”*

**CONTACT PERSON:**

Jory Johner, 801-363-4250 ext. 1110, [jjohner@wfr.org](mailto:jjohner@wfr.org)

**EXHIBIT:**

Draft RTP Amendment Process August 2021 (changes highlighted)

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# Regional Transportation Plan Amendment Process

(Adopted by the Wasatch Front Regional Council on March 26, 2020; update proposed to be adopted on August 26, 2021)

## Overview

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The establishment of a process to address periodic requests to revise the Wasatch Front Regional Transportation Plan (RTP) and the Wasatch Choice Regional Vision will help reduce the time needed to review and determine whether an amendment should be made. There are three general sources for RTP or Wasatch Choice Regional Vision amendment requests: (1) local request from city or county elected officials that usually involve collector roads, minor arterials, general land use centers, or regionally significant centers; (2) environmental impact statements (EIS) or Transportation Improvement Program (TIP) amendments that make specific recommendations that change the RTP project listing or phasing; and (3) periodic requests from the Utah State Legislature, the Utah Department of Transportation (UDOT), and the Utah Transit Authority (UTA) that require an amendment to the RTP for specific projects or the phasing of existing projects.

Some minor modifications can be made by the Wasatch Front Regional Council (WFRC) staff without action by the Regional Council. Others do not require a new air quality conformity finding but do need an opportunity for public comment and approval by the Regional Growth Committee (RGC). Some changes require a new air quality conformity finding and/or a new regional emissions analysis including a full 30-day public comment period before final approval. These three levels of amendments are described below.

## Level 1: Staff Modification

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These types of amendments are minor in nature and would include:

- » any change to the existing RTP functional classification
- » any change or addition of an individual active transportation project
- » any change or clarification needed of the RTP's project description
- » any change to existing project right-of-way or addition of roadway or transit corridor preservation projects
- » any change to existing or addition of collector and minor arterial operational projects
- » any change to existing or addition of collector and minor arterial new construction or widening roadway projects less than \$10 million
- » any change to existing or addition of a core bus route or express bus route less than \$5 million
- » any change or addition to the Wasatch Choice Regional Vision land use centers

## LEVEL 1 - PROCESS

These types of RTP amendments, with the exception of Wasatch Choice Regional Vision land use centers, would be reviewed by WFRC staff members. If staff determines that a change is warranted, the amendment could be implemented without additional process beyond that listed below. Level 1 amendments would require approval by the WFRC Executive Director (in consultation with the Federal Highway Administration and/or Interagency Consultation Team as applicable), RGC Chair, and Vice-Chair, with the RGC Technical Advisory Committees (TACs) and the RGC informed of changes. The WFRC staff and/or RGC Chair/Vice-Chair can recommend a project be elevated to Level 2 based on factors including: potential impacts, professional judgment, or lack of consensus. The approval of Level 1 amendments would require the following procedure:

- A. Formal request submitted by local community elected official or transportation agency planning or regional director



- B. WFRC staff review and coordination with sponsoring agency representatives – planners, engineers, and/or elected officials
- C. WFRC staff coordination with the Federal Highway Administration to obtain concurrence of project significance level and exemption status - regionally significant, non-regionally significant, non-exempt, and exempt
- D. WFRC staff recommendation and review with the RGC Chair and Vice-Chair
- E. WFRC Executive Director approval
- F. Inform RGC TAC and RGC
- G. Respective entities may be notified of the change
- H. Update and notification of amendment changes on the WFRC website including any tables, spreadsheets, and/or maps

Wasatch Choice Regional Vision land use center amendments would be reviewed by WFRC staff members, in consultation with affected communities. If a change is warranted, the amendment could be implemented without additional process beyond that listed below. These Level 1 amendments would require approval by the WFRC Executive Director in consultation with the RGC Chair and Vice-Chair, with the RGC Technical Advisory Committees (TACs) and the RGC informed of changes. The WFRC staff and/or RGC Chair/Vice-Chair can recommend a project be elevated to Level 2 based on factors including: potential impacts, professional judgment, or lack of consensus. The approval of amendments to Wasatch Choice Regional Vision land use centers would require the following procedure:

- A. Request submitted by local community or is initiated by WFRC in consultation with the local community
- B. WFRC staff review and coordination with affected community representatives – planners, engineers, and/or elected officials
- C. WFRC staff recommendation and review with the RGC Chair and Vice-Chair
- D. WFRC Executive Director approval
- E. Inform RGC TAC and RGC
- F. Respective entities may be notified of the change
- G. Update and notification of amendment changes on the WFRC website including any tables, spreadsheets, and/or maps

## Level 2: Board Modification for Non-Regionally Significant Projects

These types of RTP and Wasatch Choice Regional Vision amendments may include the following:

- » full city-wide active transportation plan updates – including both regional or base bicycle routes
- » any change to existing or addition of principal arterial or freeway operational projects
- » any change to existing or addition of collector and minor arterial new construction or widening roadway projects, \$10 million or more
- » any change to existing or addition of a core bus route or express bus route, \$5 million or more

### LEVEL 2 - PROCESS

These types of RTP modifications would be reviewed by WFRC staff; sponsoring local community planners, engineers, and/or elected officials; the Federal Highway Administration and/or Interagency Consultation Team as applicable; TACs; the RGC; and the general public. The WFRC delegates approval of these modifications to the RGC. The RGC could recommend a formal 30-day public comment period if desired. The approval of Level 2 amendments would require the following procedure:



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- A. Formal request submitted by local community elected official or transportation agency planning director or regional director
  - B. WFRC staff review and coordination with sponsoring agency representatives – planners, engineers, and/or elected officials
  - C. WFRC staff financial constraint analysis in coordination with sponsoring agency
  - D. WFRC staff coordination with the Federal Highway Administration to obtain concurrence of project significance level and exemption status - regionally significant, non-regionally significant, non-exempt, and exempt
  - E. WFRC staff data collection, travel demand modeling, and technical considerations requested by the RGC
  - F. Review and recommendation by the appropriate RGC TAC
  - G. Recommendation and approval by the RGC
  - H. Respective entities may be notified of the change
  - I. Update and notification of amendment changes on the WFRC website including any tables, spreadsheets, and/or maps

### Level 3: Full Amendment for Regionally Significant Projects

These types of RTP amendments would involve any change or modification to a regionally significant project as defined by either the RTP or through inter-agency consultation. The RTP defines a project to be regionally significant if it serves regional transportation needs, such as access to or from areas outside of the region, major activity centers, major planned developments, or transportation terminals. Included as regionally significant projects would be projects on principal arterial highways and fixed guideway transit facilities that offer an alternative to regional highway travel. The WFRC may identify a few minor arterial streets which are considered regionally significant. These designations have been arrived at by inter-agency consultation. A regionally significant project could also be determined by inter-agency consultation or based on the results and analysis provided by the WFRC travel model. This level of RTP amendment would also require a new air quality conformity determination and may require evaluation of WFRC's Congestion Management Process. Level 3 amendments may include all of the following circumstances:

- » any change or modification of a regionally significant transportation project, such as number of lanes, alignment, length, and/or deletion
- » a significant change in the location, type, or size of a fixed guideway transit facility or stop
- » any change in the recommended financially constrained phasing of a regionally significant transportation project
- » the addition of any regionally significant transportation project to the RTP

### LEVEL 3 - PROCESS

These types of RTP amendment would be reviewed by city planners, elected officials, the Federal Highway Administration and/or Interagency Consultation Team as applicable, the TACs, the County Council of Governments (COGs), the RGC, and the Wasatch Front Regional Council. The approval of Level 3 amendments would require the following procedures:

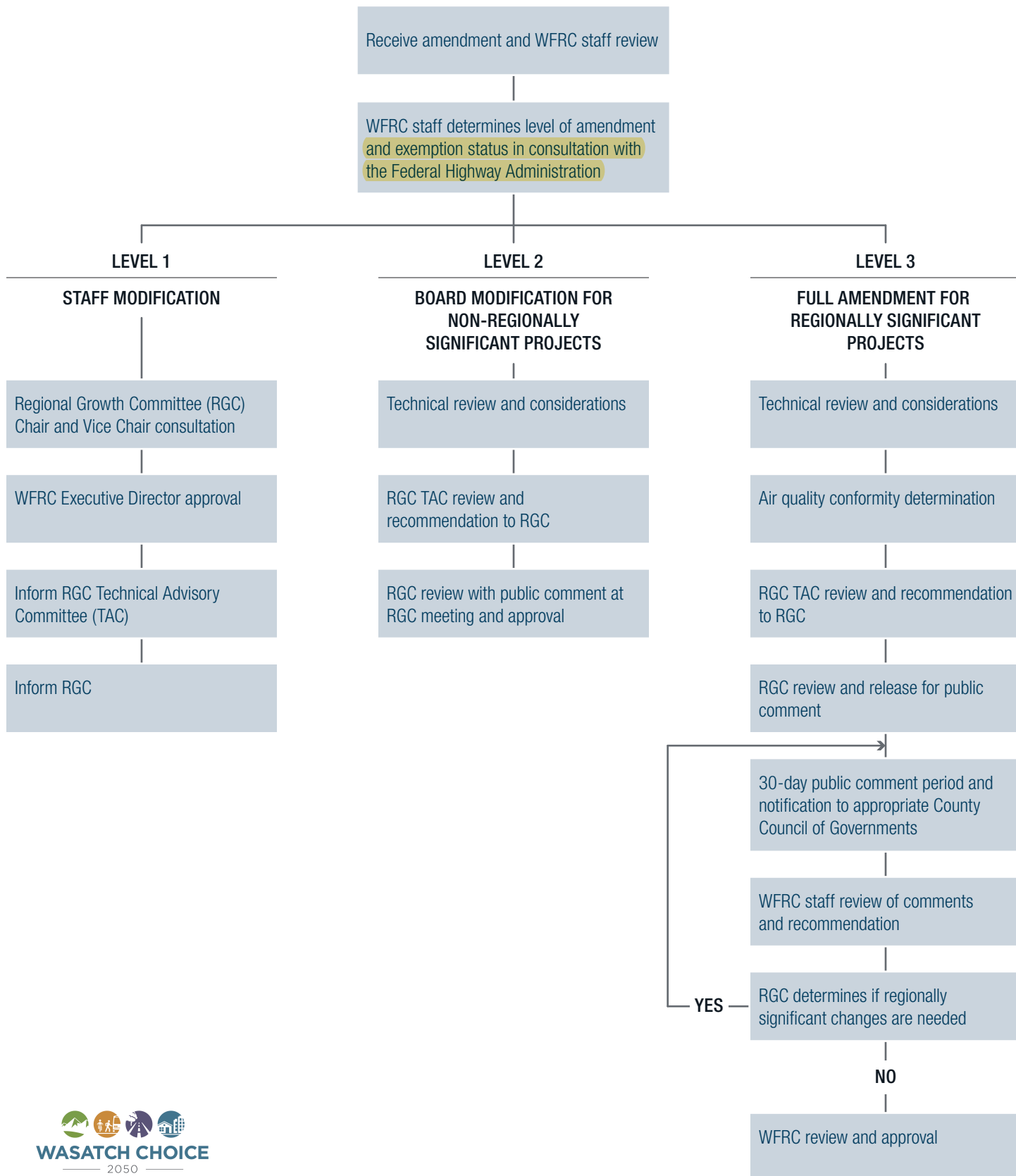
- A. Formal request submitted by local community elected official or transportation agency planning director or regional director
- B. WFRC staff review and coordination with sponsoring agency representatives – planners, engineers, and/or elected officials
- C. WFRC staff financial constraint analysis in coordination with sponsoring agency
- D. WFRC staff coordination with the Federal Highway Administration to obtain concurrence of project significance level and exemption status - regionally significant, non-regionally significant, non-exempt, and exempt



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- E. WFRC staff data collection, travel demand modeling, and technical considerations
  - F. A new air quality conformity determination as per current modeling procedures
  - G. Review and recommendation by the appropriate RGC TAC
  - H. Review and recommendation by the RGC for public comment
  - I. 30-day public comment would be noticed and a staff report provided to the appropriate COGs
  - J. A written staff response within 30-days to all public comments received
  - K. Review and recommendation by the RGC (if additional significant modifications are necessary as a result of the comment period, then a new 30-day comment period would be warranted)
  - L. Review and approval by the Wasatch Front Regional Council
  - M. Respective entities may be notified of the change
  - N. Update and notification of amendment changes on the WFRC website including any tables, spreadsheets, and/or maps



# Regional Transportation Plan Amendment Process



# Regional Transportation Plan Amendment Process Levels

		LEVEL 1 STAFF MODIFICATION	LEVEL 2 BOARD MODIFICATION	LEVEL 3 FULL AMENDMENT
		Staff or Regional Growth Committee Chair/Vice Chair could recommend elevating to Level 2	Regional Growth Committee could recommend 30-day public comment period	-
Roadway	Ownership change	All ownership changes	-	-
	Corridor preservation	All corridor preservation projects	-	-
	Operational projects	Collectors and minor arterials	Principal arterial and freeways	-
	New construction or widening projects	Collectors and minor arterials, less than \$10 Million	Collectors and minor arterials, \$10 Million or more	Principal arterials and freeways
Transit	Corridor preservation	All corridor preservation projects	-	-
	New construction, operational, or point projects	Core route and express bus, less than \$5 Million	Core route and express bus, \$5 Million or more	Fixed guideway and bus rapid transit
Active Transportation		Individual active transportation facilities	Full city-wide active transportation plan updates	-
Land Use		Wasatch Choice Regional Vision land use centers	-	-



# Regional Transportation Plan Amendment Process Timeline

## Level 1 - Staff Modification

	ACTIVITY	TIME REQUIRED
Pre-Month 1/Month 1	Receive and review with applicant (including discussion and refinement of application)	Due to WFRC staff by end of 2nd week of Month 1
	Staff determines amendment level and exemption status in consultation with the Federal Highway Administration	3rd week of Month 1
Month 2	Staff coordination with Regional Growth Committee (RGC) Chair and Vice Chair	1st week of Month 2
	Executive Director approval	2nd week of Month 2
	Inform RGC Technical Advisory Committees (TAC)	3rd Wednesday of Month 2
Month 3	Inform RGC	3rd Thursday of Month 3

## Level 2 - Board Modification

	ACTIVITY	TIME REQUIRED
Pre-Month 1/Month 1	Receive and review with applicant (including discussion and refinement of application)	Due to WFRC staff by end of 2nd week of Month 1
	Staff determines amendment level and exemption status in consultation with the Federal Highway Administration	3rd week of Month 1
	Data collection, travel demand modeling, and technical considerations	3rd and 4th week of Month 1
Month 2	Regional Growth Committee (RGC) Technical Advisory Committee (TAC) recommendation to RGC	3rd Wednesday of Month 2
Month 3	Internal coordination	1st and 2nd weeks of Month 3
	RGC review with public comment and approval	3rd Thursday of Month 3

For Levels 1 and 2, there are five possible amendment cycles:

	MONTH 1	MONTH 2	MONTH 3
1	January	February	March
2	March	April	May
3	June	July	August
4	August	September	October
5	November	December	January

## Level 3 - Full Amendment

	ACTIVITY	TIME REQUIRED
Pre-March/March	Receive and review with applicant (including discussion and refinement of application)	Due to WFRC staff by end of 2nd week of March
	Staff determines amendment level and exemption status in consultation with the Federal Highway Administration	3rd week of March
	Data collection, travel demand modeling, and technical considerations	3rd and 4th week of March
April	Preliminary air quality determination	Month of April
	Regional Growth Committee (RGC) Technical Advisory Committee (TAC) recommendation to RGC	3rd Wednesday of April
May	Draft air quality memorandum	1st of April to the 1st week of May
	Internal coordination	1st and 2nd weeks of May
	RGC review and approval for public comment	3rd Thursday of May
	Council of Government (COG) review (as needed)	
	<ul style="list-style-type: none"> <li>• Salt Lake County</li> <li>• Weber County</li> <li>• Davis County</li> <li>• Box Elder County</li> </ul>	4th Thursday of May 1st Monday of June 2nd Wednesday of June Quarterly as needed (January, April, July, October)
June	30-day public comment period	Month of June
July	Staff review comments with applicants	Month of July
	Optional TAC presentation	3rd Wednesday of July
August	Internal coordination	1st and 2nd weeks of August
	RGC review and recommendation	3rd Thursday of August
	Internal coordination	2nd and 3rd weeks of August
	WFRC review and approval with final air quality memorandum	4th Thursday of August



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# Regional Transportation Plan Amendment Technical Considerations

## Process and Screening

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1. Review each project and determine the level of amendment needed as per the Regional Transportation Plan Amendment Process adopted by the Wasatch Front Regional Council on March 26, 2020.
2. Determine which of the following requirements are applicable for each project:

### **DATA REQUIREMENTS (REQUIRED INFORMATION FROM PROJECT SPONSOR)**

- » Type of project (capacity improvement, operational improvement, etc.)
- » Type of functional classification and regional significance
- » Cost of project
- » Length of project
- » Sponsor identified issues and benefits
- » Project phase requested
- » Requested or secured funding source (corridor preservation request, sales tax revenue, TIF, STP, etc.)

### **PRE-SCREENING REQUIREMENTS (REVIEWED WITH PROJECT SPONSOR PRIOR TO “GOAL ORIENTED TECHNICAL CONSIDERATIONS FOR RTP AMENDMENTS” BELOW)**

- » Assess impacts on existing or planned road, transit, or active transportation facilities
- » Assess any impacts to community character
- » Supports environmental sustainability
- » Supports access to parks, open space, and recreation

### **REVIEW PUBLIC COMMENTS**

- » Review any public comments for amendment projects

## Goal-Oriented Technical Considers for RTP Amendments

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**LEVEL 1:** Projects exempt from the following Technical Considerations

**LEVEL 2:** Projects are evaluated using only the Technical Consideration indicated by a yellow dot •

**LEVEL 3:** Projects are evaluated using all of the following Technical Considerations



## SAFE, USER-FRIENDLY STREETS •



Objective	Mitigates safety issues
Technical Considerations	<b>Roadway:</b> UDOT's safety index average or actual number of fatalities and serious injuries
	<b>Transit:</b> Reported bus and fixed guideway crashes
	<b>Transit:</b> Existing and planned first- and last-mile connections to stations or stops

## MANAGEABLE AND RELIABLE TRAFFIC CONDITIONS •



Objective	Improves traffic conditions through management and reliability
Technical Considerations	<b>Roadway:</b> Change in vehicle hours of delay from existing traffic conditions or vehicle hours traveled (VHT)
	<b>Roadway:</b> Increases connectivity

## FISCALLY EFFICIENT COMMUNITIES AND INFRASTRUCTURE •



Objective	Project readiness
Technical Considerations	<b>Roadway/transit:</b> Is part of a planning or environmental study
	<b>Roadway/transit:</b> Efforts underway to preserve the project's corridor

## LIVABLE AND HEALTHY COMMUNITIES •



Objective	Supports the Wasatch Choice <b>Regional Vision</b>
Technical Considerations	<b>Roadway/transit:</b> Provides improved access to urban, town, or job centers (as per GIS outputs and map review)

## ACCESS TO ECONOMIC AND EDUCATIONAL OPPORTUNITIES



Objective	Improves access to job and educational opportunities
Technical Considerations	<b>Roadway/transit:</b> Connection to strategic clusters, freight centers, or on freight plan
	<b>Roadway/transit:</b> Access to jobs and educational centers ("access to opportunities" as per modeling outputs)

## QUALITY TRANSPORTATION CHOICES



Objective	Supports transportation choices
Technical Considerations	<b>Roadway:</b> Supports multi-modal choices (transit, bicycle, and pedestrian)
	<b>Transit:</b> Existing and projected ridership

## CLEAN AIR



Objective	Supports on-going efforts to maintain air quality standards
Technical Considerations	<b>Roadway/transit:</b> Separate process (i.e. air quality modeling and conformity determination on a regional level for Level 3 projects)



## HOUSING CHOICES AND AFFORDABLE LIVING



<b>Objective</b>	Provide housing for people in all life stages and incomes
<b>Technical Considerations</b>	<b>Roadway/transit:</b> Serves or does not adversely impact (roadway) identified vulnerable communities (low income, minority, or zero-car households) and/or areas with concentrated elderly populations

## AMPLE PARKS, OPEN SPACE, AND RECREATIONAL OPPORTUNITIES



<b>Technical Considerations</b>	Determined in project pre-screening
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## A SUSTAINABLE ENVIRONMENT INCLUDING WATER, AGRICULTURE, AND OTHER NATURAL RESOURCES



<b>Technical Considerations</b>	Determined in project pre-screening
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**DATE:** August 11, 2021  
**AGENDA ITEM:** 5b  
**SUBJECT:** **ACTION:** Amendment #3 to the 2019-2050 RTP  
**PREPARED BY:** Jory Johner

At the Regional Growth Committee (RGC) meeting, WFRC staff will present the proposed Amendment Number 3 to the 2019-2050 Regional Transportation Plan (2019-2050 RTP) - the regional transportation element of the Wasatch Choice Regional Vision. These proposed amendments were presented to and approved by the Regional Growth Committee in May, and subsequently released for public comment and review. They are now back before RGC for final approval. No changes have been made to the proposed amendments from what RGC reviewed in May (with the exception of a modification to one “Level 1” amendment that does not require RGC action, as explained below).

The projects within this amendment have received the following review:

- Technical Advisory Committees (TACs) on April 28, 2021,
- RGC meeting on May 20, 2021,
- Box Elder, Weber, Davis and Salt Lake County Councils of Governments (COGs) in May and June 2021, and
- A formal 30-day public review and comment period was held from June 26 through July 31, 2021 with two public open houses.

The only modification from what RGC reviewed in May was changing the extent (length) of the “3 Gate Rail Trail” near Hill AFB.

#### **BACKGROUND:**

Every four years the Wasatch Front Regional Council (WFRC) prepares and adopts a Regional Transportation Plan (RTP), a component of the Wasatch Choice Regional Vision. WFRC adopted the current 2019-2050 RTP in May 2019. While the RTP receives considerable review before being formally adopted, circumstances may warrant a change to the RTP after its initial adoption, including the identification of new funding sources, the determination of final environmental impact statements, or the rapid development of certain projects. WFRC has a written [RTP amendment process](#), and project amendments are organized into three levels. “Level 1 - Staff Modifications” and “Level 2 - Board Modifications” and are included in the Exhibit to this memo. The action requested on August 19th is to make a recommendation to the Regional Council to adopt the “Level 3 - Full Amendment” projects into the 2019-2050 RTP.

Amendment 3 includes a total of 22 projects:

- 13 Level 3 (full amendment of regionally significant projects) requests, 11 from UDOT and two from UTA;
- Eight Level 2 (board modifications of non-regionally significant projects) requests, one each from Brigham City, Draper, Sandy, and Murray, and two each from South Weber and West Jordan; and
- One Level 1 (staff modification) request from the Military Installation Development Authority (MIDA).

A description of each of the proposed revisions are included with this memo. Technical analysis of each of the projects was shared at the May RGC meeting. Vehicle hours traveled (VHT) was reviewed for all projects in the amendment within each County. Box Elder County had no significant change in VHT, Weber County saw a reduction of 100 VHT, Davis County’s reduction

was 450 VHT, and Salt Lake County's reduction in VHT was 4,630. The proposed amendment meets the air quality conformity determination and satisfies the requirement to be financially constrained within reasonably anticipated available revenues.

With the legislature passing House Bill 433 and giving direction to the Transportation Commission and UDOT to program the Transportation Investment Fund (TIF) out to 2030, most proposed recommendations are to phasing, alignment/extent changes, costs adjustments, and deletions. Other local recommendations of projects include city-wide active transportation plans, Wasatch Choice neighborhood- or town-center changes, deletions, and individual active transportation projects. Technical considerations were considered in evaluating the projects, from a regional perspective, and will be presented at the RGC meeting.

#### **PROCESS:**

The WFRC staff has discussed the amendment requests with their respective sponsors, analyzed the scope of the project, potential technical considerations, and financial implications and determined that the 2019-2050 RTP is able to maintain its fiscal constraint and air quality conformity for these projects in all phases. The RTP is required to be "fiscally constrained" which means that it is reasonably based on the projected availability of funding from current or potential additional sources. It is also required to conform to the air quality emissions limitations in official air quality plans.

The WFRC staff presented all projects within this amendment to the RGC's Salt Lake County PlanTAC (Technical Advisory Committee – TAC) and the Ogden-Layton RGC TAC on April 28, 2021, groups composed predominantly of the planners from the communities in the WFRC region. The RGC TACs made a recommendation to RGC to approve the Level 2 - Board Modification projects and release the Level 3 - Full Amendments to public comment. At the May 20, 2021 RGC meeting, an opportunity for public comments was given on the Level 2 - Board modification projects and RGC approved the adoption of the Level 2 projects into the 2019-2050 RTP. The RGC also made a motion to release the Level 3 - Full Amendment projects and Draft Air Quality Memorandum 40 for a formal 30-day public review and comment period. No comments were received during the comment period from June 26 through July 31, 2021 or at the two public open houses on July 13, 2021 and July 15, 2021. Only one change to the 22 projects from what the RGC TACs and RGC reviewed in April and May 2021 took place. This change was to the Level 1 - Staff Modification project (the 3 Gate Rail Trail) to modify the project extents and was coordinated with the RGC Chair and Vice-chair and approved by the WFRC Executive Director.

#### **RECOMMENDATION:**

During the meeting, the WFRC staff requests that the Regional Growth Committee make a recommendation to the Regional Council to approve the Level 3 - Full Amendment projects within Amendment Number 3 to the 2019-2050 RTP along with the Draft Air Quality Memorandum 40.

Suggested motion language: *I make a motion to recommend approval of the Level 3 - Full Amendment projects and the air quality conformity determination as found in Draft Air Quality Memorandum 40 for Amendment Number 3 to the 2019-2050 RTP by the Wasatch Front Regional Council at the August 26, 2021 meeting.*

#### **CONTACT PERSON:**

Jory Johner, WFRC 801-458-3090, [jjohner@wfr.org](mailto:jjohner@wfr.org)

**ATTACHMENT:**

Amendment Number 3 Project Overviews  
Draft Air Quality Memorandum 40

## **AMENDMENT NUMBER 3 PROJECT OVERVIEWS**

### **Level 1 – Staff Modifications (For information only)**

#### **MIDA**

##### **1. Addition of the 3 Gate Rail Trail**

###### **Cost: \$19.6 Million**

MIDA is requesting an amendment to add a new regional active transportation project from the Roy Hill Air Force Base (HAFB) Gate to the Clearfield West HAFB Gate. This proposed trail is a 6.1-mile off-street trail adjacent to the I-15 corridor from the Weber River Parkway to the West Gate of HAFB in Clearfield. The project will utilize an abandoned rail corridor. Potential funding sources include the Defense Community Infrastructure Pilot Program and the Military Installation Development Authority. This is a new Phase 1 Regional Transportation Plan (RTP) project.

*Note:* the extents of this trail project were modified at the request of and in consultation with the affected communities, and approved pursuant to WFRC's adopted RTP amendment process for Level 1 amendments.

### **Level 2 – Board Modifications**

#### **BRIGHAM CITY**

##### **1. Phase Change to Forest Street Railroad Crossing**

###### **Cost: \$22 Million**

Brigham City is requesting an amendment to move up in phase the new construction of a grade-separated railroad crossing on Forest Street at approximately 900 West. This project will improve travel time reliability and increase safety of the railroad crossing. This project has revenue from bonding approved during the 2021 Legislative Session.

#### **DRAPER**

##### **2. City-wide Active Transportation Plan**

###### **Cost: \$15.3 Million**

The City of Draper is requesting an amendment that will include the facilities within the City's recently adopted Active Transportation Plan that was facilitated through the Transportation and Land Use Connection Program. This plan identifies new active transportation facilities, updates existing bicycle facilities to higher comfort, identifies intersections requiring safer crossings, and improves connections to existing and planned regional trails. There are 13 total projects that will be added to the regional AT map and project list. These facilities are found throughout Phases 1, 2, and 3 of the RTP. Other projects from the plan will be added to the Base Bicycle Network, but not included in any phases. RTP maps and projects lists will be updated upon approval of the request. Possible funding sources include City funds, County funds, STP, CMAQ, TAP, TIF Active, and/or TTIF First/Last Mile.

## **MURRAY**

### **3. Modification to the Murray Fashion Place Mall Center**

Murray City is requesting an amendment to combine an existing neighborhood, industrial, and employment center into a new urban center. The new center is bounded by I-15, Fashion Boulevard, 6100 South, and 6790 South and includes Fashion Place West TRAX station and the Fashion Place Mall. This center will increase connectivity between transit, Fashion Place Mall, and the medical employment centers and will create an opportunity for improved urban design in future mall expansion projects.

## **SANDY**

### **4. City-wide Active Transportation Plan**

#### **Cost: \$20.9 Million**

The City of Sandy is requesting an amendment that will include the facilities within the City's recently adopted Active Transportation Plan that was facilitated through the Transportation and Land Use Connection Program. This plan identifies new active transportation facilities, updates existing bicycle facilities to higher comfort, identifies intersections requiring safer crossings, and improves connections to existing and planned regional trails. There are 22 total projects that will be added to the regional AT map and project list. These facilities are found throughout Phases 1, 2, and 3 of the RTP. Other projects from the plan will be added to the Base Bicycle Network, but not included in any phases. RTP maps and projects lists will be updated upon approval of the request. Possible funding sources include City funds, County funds, STP, CMAQ, TAP, TIF Active, and/or TTIF First/Last Mile.

## **SOUTH WEBER**

### **5. Alignment Change to South Bench Drive from I-84 to South Weber Drive**

#### **Cost: \$14.0 Million**

South Weber City is requesting an amendment to realign the new construction project South Bench Drive between I-184 and South Weber Drive. South Weber Drive is proposed as a three-lane collector. This project will increase street connectivity and provide access in an undeveloped section of South Weber City. Funding sources include possible developer funds, impact fees, city funds, county funds, or state funds.

### **6. Project Removal of South Bench Drive from South Weber Drive to Fairfield Road**

#### **Cost: \$43 Million**

South Weber City is requesting the removal of the new construction project South Bench Drive between South Weber Drive and Fairfield Road. The removal of this project will better align the Regional Transportation Plan with the adopted South Weber General Plan.

## **WEST JORDAN**

### **7. Phase Change to 7800 South**

#### **Cost: \$11 Million**

West Jordan is requesting an amendment that will allow for a phase change of widening 7800 South from SR-111 to 5600 West from Phase 3 to Phase 1. Funding sources include approved STP funds.

## **8. City-wide Active Transportation Plan**

### **Cost: \$13.1 Million**

The City of West Jordan is requesting an amendment that will include the facilities within the City's recently adopted Active Transportation Plan that was facilitated through the Transportation and Land Use Connection Program. This plan identifies new active transportation facilities, updates existing bicycle facilities to higher comfort, identifies intersections requiring safer crossings, and improves connections to existing and planned regional trails. There are six total projects that will be added to the regional AT map and project list. These facilities are found throughout Phases 1, 2, and 3 of the RTP. Other projects from the plan will be added to the Base Bicycle Network, but not included in any phases. RTP maps and projects lists will be updated upon approval of the request. Possible funding sources include City funds, County funds, STP, CMAQ, TAP, TIF Active, and/or TTIF First/Last Mile.

## **Level 3 – Full Amendments**

### **UTAH DEPARTMENT OF TRANSPORTATION**

#### **1. Cost Update for I-15 Interchange at 5600 South (Weber County)**

##### **Cost: \$188 Million**

This amendment will update the cost of the I-15 interchange at 5600 South in Weber County rebuild and upgrade to \$188 Million. This project includes widening and active transportation facilities along 5600 South between I-15 and 3500 West. Funding sources include an approved one-time Legislative appropriation.

#### **2. Phase Change to I-15 from Farmington to Davis/Salt Lake County Line**

##### **Cost: \$1.339 Billion**

UDOT is requesting a phase change of I-15 from the Davis/Salt Lake County Line to Farmington from Phase 3 to Phase 1. This project is expected to receive Transportation Investment Fund funding.

#### **3. Project Removal of I-15 from 2600 South to Davis/Salt Lake County Line**

UDOT is requesting an amendment to change the phase of the reconstruction and widening project along I-15 from Farmington to 600 North in Salt Lake City from Phase 3 to Phase 1. Due to this project moving forward, a Phase 1 widening project of I-15 from 2600 South to the Davis/Salt Lake County Line is requested to be removed from the RTP as these two projects would be redundant. Funding sources include anticipated Transportation Investment Fund funding.

#### **4. Phase Change of I-15 from Davis/Salt Lake County Line to 600 North**

##### **Cost: \$329 Million**

UDOT is requesting a phase change of I-15 from the Davis/Salt Lake County Line to 600 North from Phase 3 to Phase 1. This project is expected to receive Transportation Investment Fund funding.

**5. Extent and Cost Update of Northbound I-15 from 2100 South to Bangerter Highway**  
**Cost: \$289 Million**

UDOT is requesting an extent and cost change of northbound I-15 widening from 2100 South to Bangerter Highway. The request would change the limits to 600 South to I-215. The new cost is \$289 Million. This project is expected to receive Transportation Investment Fund funding.

**6. Extent and Cost Update of Northbound I-15 Collector and Distributors from I-215 to Bangerter Highway**  
**Cost: \$296 Million**

UDOT is requesting an extent and cost change of the northbound I-15 Collector and Distributor system. The request would change the northern limit from I-215 to 9000 South. The new cost is \$296 Million. This project is expected to receive Transportation Investment Fund funding.

**7. Project Removal of Bangerter Highway Interchange at SR-201**  
**Cost: \$18 Million**

UDOT is requesting an amendment to remove the upgrade of the SR-201 interchange at Bangerter Highway. A system-to-system improvement at this interchange will remain on the RTP. UDOT expects cost savings by prioritizing the system-to-system improvements.

**8. Phase Change and Extent Update of Mountain View Corridor from Old Bingham Highway to 13400 South**  
**Cost: \$316 Million**

UDOT is requesting an amendment to update the phase, cost, and extent of Mountain View Corridor from Old Bingham Highway to 13400 South. The request would change the southern extent from 13400 South to Porter Rockwell Boulevard. The phase change is requested from Phase 2 to Phase 1. The new cost is \$316 Million. This project is expected to receive Transportation Investment Fund funding.

**9. Extent and Cost Update of Mountain View Corridor from 13400 South to Salt Lake/Utah County Line**  
**Cost: \$126 Million**

UDOT is requesting an amendment to update the extent and cost of the future widening of Mountain View Corridor from 13400 South to the Salt Lake/Utah County line. The request would change the northern extent from 13400 South to Porter Rockwell Boulevard. The new cost is \$126 Million. This project is expected to receive Transportation Investment Fund funding.

**10. Phase Change and Cost Update of US-89 Interchange at I-84**  
**Cost: \$240 Million**

UDOT is requesting an amendment to change the scope of the US-89 interchange at I-84 to separate the interchange project into two projects (see below). This amendment request would change the phase of the existing system-to-system interchange from Phase 1 to Phase 2. The new cost is \$240 Million. Funded through the Transportation Investment Fund.

**11. New Project US-89 Interchange at I-84**

**Cost: \$60 Million**

UDOT is requesting an amendment to change the scope of the US-89 interchange at I-84 to separate the interchange project into two projects (see above). This amendment request is a new Phase 1 project and would upgrade the interchange to a Single-Point Urban Interchange (SPUI). This project would allow for a less expensive, near-term solution while allowing a full system-to-system upgrade to be phased in with little “throw away.” Funding sources include additional Transportation Investment Fund funds to construct the Phase 1 SPUI upgrade.

**UTAH TRANSIT AUTHORITY**

**12. Phase Change to FrontRunner Strategic Double Tracking**

**Cost: \$200 Million**

UTA is requesting an amendment to change the phase of strategic double tracking FrontRunner from Phase 2 to Phase 1. This project will increase reliability, reduce travel times, and may allow for increased frequency and additional service. Funding sources include approved one-time Legislative appropriation and bonding revenue from the Transit Transportation Investment Fund (TTIF).

**13. Phase Change to S-Line Streetcar Extension from McClelland to Highland Drive**

**Cost: \$12 Million**

UTA is requesting an amendment to change the phase of extending the S-line Streetcar from McClelland to Highland Drive in Salt Lake City from Unfunded to Phase 1. Funding sources include bonding revenue from the Transit Transportation Investment Fund (TTIF).

# Air Quality Memorandum

**REPORT NO.** 40 - DRAFT

**DATE** May 12, 2021

**SUBJECT** CONFORMITY ANALYSIS FOR AMMENDMENT #3 OF THE WFRC 2019-2050 REGIONAL TRANSPORTATION PLAN.

**ABSTRACT** The FAST Act and the Clean Air Act Amendments (CAAA) require that all regionally significant highway and transit projects in air quality non-attainment and maintenance areas be derived from a “conforming” Regional Transportation Plan and Transportation Improvement Program. A conforming Plan or Program is one that has been analyzed for emissions of controlled air pollutants and found to be within emission limits established in the State Implementation Plan (SIP) or within guidelines established by the Environmental Protection Agency (EPA) until such time that a SIP is approved. This conformity analysis is made by the Wasatch Front Regional Council (WFRC), as the Metropolitan Planning Organization for the Salt Lake-West Valley and Ogden-Layton Urbanized Areas, and submitted to the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) for their concurrence. This conformity analysis is being prepared according to the EPA transportation conformity regulations published in Federal Register March 2012 and according to FHWA final rulemakings found in the FAST legislation. The EPA approved MOVES model for estimating vehicle emissions was used for this conformity analysis.

This conformity analysis addresses the emissions impact of the 2019-2050 RTP, including Amendments 1, 2, and 3. The projected vehicle activity is based on Version 8.3.1 of the WFRC travel demand model and the 2012 Household Travel Survey of trip making activity. For a detailed list of projects included in this conformity analysis, see Appendix L of the Regional Transportation Plan: 2019-2050 at [https://drive.google.com/drive/folders/1kX4byj\\_BkDd9F\\_64-jCSw5ftao7\\_65eC](https://drive.google.com/drive/folders/1kX4byj_BkDd9F_64-jCSw5ftao7_65eC).

The Amendment 3 revisions to this project list can be found in Appendix-2 at the end of this document. Based on the analysis presented in this document, the WFRC 2019-2050 RTP conforms to the State Implementation Plan or the Environmental Protection Agency interim conformity guidelines for all pollutants in applicable non-attainment or maintenance areas. Therefore, all transportation projects in Box Elder, Weber, Davis, Salt Lake, and Tooele Counties included in the Amended 2019-2050 RTP are found to conform.

**Wasatch Front Regional Council**

41 North Rio Grande Street, Suite 103  
Salt Lake City, Utah 84101

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## **A. Conformity Requirements**

### **Conformity Process**

Since the commencement of the federal transportation planning requirements in the late 1960s, further requirements (most recently the 2015 Fixing America's Surface Transportation Act (FAST) and the 1990 Clean Air Act Amendments) have added to the responsibilities and the decision making powers of local governments through the Metropolitan Planning Organization. The Wasatch Front Regional Council (WFRC) is the Metropolitan Planning Organization for the Salt Lake/West Valley and Ogden / Layton Urbanized Areas. This report summarizes WFRC's conformity analysis of the 2019-2050 RTP with the Division of Air Quality's State Implementation Plan (SIP) and the Environmental Protection Agency's interim conformity guidelines. This conformity analysis is subject to public and agency review, and requires the concurrence of the Federal Highway Administration and Federal Transit Administration.

In November, 1993, the Environmental Protection Agency and the U.S. Department of Transportation issued rules establishing the procedures to be used to show that transportation plans and programs conform to the SIP. The conformity rules establish that federal funds may not be used for transportation projects that add capacity in areas designated as "non-attainment (or maintenance) with respect to the National Ambient Air Quality Standards", until and unless a regional emissions analysis of the Plan and TIP demonstrates that the projects conform to the SIP. This restriction also applies to "regionally significant" transportation projects sponsored by recipients of federal funds even if the regionally significant transportation project uses local funds exclusively.

Davis and Salt Lake Counties, Salt Lake City, Ogden City and portions of Weber, Box Elder and Tooele Counties are designated as non-attainment (or maintenance) for one or more air pollutants. Specifically, there are four areas in the Wasatch Front region for which the conformity rules apply. These areas are listed in Table 1 below.

**Table 1**  
**Wasatch Front Region Non-attainment Designations**

Area	Designation	Pollutant	Attainment Date
Salt Lake City	Maintenance Area	Carbon Monoxide (CO)	1983
Ogden City	Maintenance Area	Carbon Monoxide (CO)	1983
	Moderate Non-Attainment Area	Particulate Matter (PM <sub>10</sub> )	TBD
Salt Lake County	Moderate Non-Attainment Area	Particulate Matter (PM <sub>10</sub> )	2003
Salt Lake (including Davis, Salt Lake, and portions of Weber, Box Elder, and Tooele Counties)	Serious Non-Attainment Area	Particulate Matter (PM <sub>2.5</sub> )	2019
Northern Wasatch Front (including Salt Lake, Davis, and portions of Weber and Tooele Counties)	Marginal Non-Attainment Area	Ozone (O <sub>3</sub> )	2023

The CAAA established requirements for conformity. These requirements are outlined in 40 CFR 93.109 and include the following:

- Latest planning assumptions
- Transportation Control Measures (TCM)
- Emissions budget
- Projects from a conforming plan and TIP
- PM<sub>10</sub> control measures
- Latest emissions model
- Consultation
- Currently conforming plan and TIP
- CO, PM<sub>10</sub>, and PM<sub>2.5</sub> “hot spots”

Each of these requirements will be discussed in the following paragraphs.

### **Latest Planning Assumptions**

Current travel models are based on socioeconomic data and forecasts from local building permits, the Utah Division of Workforce Services, and the Governor’s Office of Management and Budget (GOMB). Base year socioeconomic data are for calendar year 2015. Forecasts of population and employment by traffic analysis zone were developed by WFRC in 2019 and are controlled to county-level forecasts produced in 2017 by the University of Utah’s Kem C. Gardner Policy Institute (GPI) funded by the Utah legislature.

### **Latest Emissions Model**

The conformity analysis presented in this document is based on EPA mobile source emissions models: MOVES3 for tailpipe emissions and AP-42 section 13.2.1 for paved road dust emissions. The application of these models will be discussed in greater detail in the Emissions Model section of this document.

### **Consultation Process**

Section 105 of 40 CFR Part 93 (Conformity Rule) requires, among other things, interagency consultation in the development of conformity determinations. To satisfy this requirement, the State Division of Air Quality (DAQ) prepared a Conformity SIP to outline the consultation procedures to be used in air quality and transportation planning. The Conformity SIP also defines the membership of the Interagency Consultation Team (ICT) as representatives from DAQ, WFRC, Mountainland Association of Governments, Utah Department of Transportation, Utah Transit Authority, EPA, FHWA, and the FTA. The Conformity SIP has been approved by EPA. WFRC followed the consultation procedures as outlined in the Conformity SIP in the preparation of this conformity analysis. As part of the public involvement procedures referenced in the Conformity SIP, WFRC presented this report to the Regional Growth Committee for review and comment. The TransCom committee includes a member of the Utah Air Quality Board as well as representatives of UDOT, UTA, and FHWA. Management level staff members from the Utah Division of Air Quality are notified of meetings and agendas of the above committees. The Utah Division of Air Quality and other members of the ICT were also provided with a copy of this report during the public comment period for the 2019-2050 RTP.

This Conformity Analysis for the 2019-2050 RTP was made available for public inspection and comment for a 30-day period in accordance with EPA conformity regulations. This analysis was also posted on the WFRC website during the comment period. Notification of the comment period was sent by electronic mail to interested stakeholders. In addition, public comment was taken during various committee meetings of the Wasatch Front Regional Council.

### **TCM Implementation**

A conformity analysis for the 2019-2050 RTP must certify that the RTP does not interfere with the implementation of any Transportation Control Measure (TCM) identified in the applicable State Implementation Plan (SIP). There are not any TCM's identified in any of the currently applicable SIP documents for the Wasatch Front Region.

### **Emissions Budget**

A comparison of mobile source emission estimates to emission budgets defined in the SIP is outlined in this document in Section D - Conformity Determination.

### **Currently Conforming Plan and TIP**

The existing 2019-2050 RTP for the Wasatch Front Area conforms to State air quality goals and objectives as noted in a letter from FHWA and FTA dated June 17, 2019. The existing 2021-2024 TIP for the Wasatch Front Area was also found to conform and this was noted in a letter from FHWA and FTA dated September 4, 2020.

### **Projects from a Conforming Plan and TIP**

**TIP Time Frame** - All projects which must be started no later than 2024 in order to achieve the transportation system envisioned by the 2019-2050 RTP are included in the 2021-2024 TIP. The TIP is fiscally constrained, meaning that only those projects with an identified source of funds are included in the TIP. Estimated funding availability is based on current funding levels and reasonable assumptions that these funds will continue to be available. Conformity for the 2021-2024 TIP is addressed separately in Air Quality Memorandum 39a.

## **Regionally Significant**

All regionally significant projects, regardless of funding source (federal, state, or local) are included in the RTP. All regionally significant projects are also included in the regional emissions analysis of the RTP. Regionally significant highway projects are identified as capacity projects on roadways functionally classified as a principal arterial or higher order facility, and certain minor arterials as identified through the interagency consultation process (see Appendix 1 for a complete definition of regionally significant projects). The latest Utah Department of Transportation Functional Classification map is used to identify functional classification. Capacity projects on interstate highways, freeways, expressways, principal arterials, certain minor arterials, light rail, and commuter rail are treated as regionally significant projects.

Because of their relative impact on air quality, all regionally significant projects regardless of funding source must be included in the regional emissions analysis, and any significant change in the design or scope of a regionally significant project must also be reflected in the analysis. All regionally significant projects have been included in the regional emissions analysis, and the modeling parameters used for these projects are consistent with the design and scope of these projects as defined in the RTP. In order to improve the quality of the travel model, minor arterials and collectors, as well as local transit service, are also included in the regional travel model (and thus the regional emissions analysis) but these facilities are not considered regionally significant since they do not serve regional transportation needs as defined by EPA. For a list of projects included in this conformity analysis, see Appendix L of the Regional Transportation Plan: 2019-2050 at

[https://drive.google.com/drive/folders/1kX4byj\\_BkDd9F\\_64-jCSw5ftao7\\_65eC](https://drive.google.com/drive/folders/1kX4byj_BkDd9F_64-jCSw5ftao7_65eC).

The Amendment 3 revisions to this project list can be found in Appendix-2 at the end of this document.

## **CO, PM<sub>10</sub> and PM<sub>2.5</sub> “Hot Spot” Analysis**

In addition to the regional emissions conformity analysis presented in this document, specific projects within carbon monoxide (CO) and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) non-attainment areas are required to prepare a “hot spot” analysis of emissions. The “hot spot” analysis serves to verify whether localized emissions from a specific project will meet air quality standards. This requirement is addressed during the NEPA phase of project development before FHWA or FTA can issue final project approval.

FHWA has issued guidance on quantitative PM<sub>10</sub> and PM<sub>2.5</sub> “hot spot” analysis to be used for the NEPA process. This guidance can be found at:

<http://www.epa.gov/otaq/stateresources/transconf/projectlevel-hotspot.htm>.

## **PM<sub>10</sub> Control Measures**

**Construction-related Fugitive Dust** - Construction-related dust is not identified in the Utah SIP as a contributor to the PM<sub>10</sub> non-attainment area. Therefore, there is no conformity requirement for construction dust. Section 93.122(d) (1) of 40 CFR reads as follows:

“For areas in which the implementation plan does not identify construction-related fugitive PM<sub>10</sub> as a contributor to the non-attainment problem, the fugitive PM<sub>10</sub> emissions associated with highway and transit project construction are not required to be considered in the regional emissions analysis.”

In the Utah PM<sub>10</sub> SIP, construction-related PM<sub>10</sub> is not included in the inventory, nor is it included in the attainment demonstration or control strategies. Control of construction-related PM<sub>10</sub> emissions are mentioned in qualitative terms in Section IX.A.7 of the SIP as a maintenance measure to preserve attainment of the PM<sub>10</sub> standard achieved by application of the control strategies identified in the SIP. Section IX.A.7.d of the SIP requires UDOT and local planning agencies to cooperate and review all proposed construction projects for impacts on the PM<sub>10</sub> standard. This SIP requirement is satisfied through the Utah State Air Quality Rules. R307-309-4 requires that sponsors of any construction activity file a dust control plan with the State Division of Air Quality.

## **Other Conformity Requirements**

**Transit Fares** - Transit fares have increased periodically and will continue to increase in response to rising operating costs. The RTP assumes that transit fare revenues will cover a constant percentage of all transit operating cost, so future fare increases are consistent with the Plan. With any price increase some market reaction is expected. While there have been some short term fluctuations in transit patronage in response to fare increases, the implementation of light rail service and other transit improvements has retained and increased transit patronage consistent with the levels anticipated by the RTP.

Plans to expand light rail service, to increase and enhance bus service, and to extend commuter rail operations are moving forward. These transit projects are envisioned in the Plan and the steps necessary to implement these projects are moving forward including various voter approved sales tax increases for transit funding.

## B. Transportation Modeling

Improvement to the WFRC travel demand model practice and procedure is an ongoing process. This conformity analysis is based on the latest version (8.3.1) of the travel demand model. Version 8.3 of the travel demand model has a 2015 base year and incorporates the results of the 2012 Household Travel Survey conducted by WFRC. Version 8.3.1 of the model made minor updates to the transportation network and socio-economic data since the previous version 8.3.

### Planning Process

Federal funding for transportation improvements in urban areas requires that these improvements be developed through a comprehensive, coordinated, and continuous planning process involving all affected local governments and transportation planning agencies. The planning process is certified annually by the Regional Council and reported to the Federal Highway Administration and Federal Transit Administration. Every four years FHWA and FTA conduct a comprehensive certification review. The certification review of August 2017 found that the WFRC planning process meets federal requirements. Recommendations were made to continue to improve WFRC's planning process and these are being addressed.

The documentation of the planning process includes at a minimum, a twenty-year Regional Transportation Plan updated at least every four years; and a four-year Transportation Improvement Program (capital improvement program) updated and adopted at least every four years. The planning process includes the involvement of local elected officials, state agencies, and the general public.

### Travel Characteristics

The WFRC travel model is used to estimate and forecast highway Vehicle Miles Traveled (VMT) and vehicle speeds for Weber, Davis, and Salt Lake Counties. The Utah State Travel Model (USTM) is used to estimate VMT and speed in Box Elder County and Tooele County. The WFRC travel demand model is based on the latest available planning assumptions and a computerized representation of the transportation network of highways and transit service. The base data for the travel demand model is reviewed regularly for accuracy and updates. The travel model files used for this conformity analysis are available upon request.

Shown below in Table 2a and Table 2b is a summary of winter and summer weekday VMT for the cities and counties in designated non-attainment areas. Totals for VMT are given for various air quality analysis years from 2019 to 2050. Note that the VMT values for Box Elder and Tooele Counties are not for the entire county but only that portion of the county designated as non-attainment for a criteria pollutant.

Seasonal factors for highway VMT variations have been revised and refined by research commissioned by the Utah Department of Transportation. Seasonal factors are determined for each link of the highway system based on the functional class (freeway or arterial) and the area type (rural, transitional, suburban, and urban). Other considerations include traffic volume and recreational activity.

**Table 2a****Vehicle Miles Traveled (HPMS Adjusted Average Winter Weekday)**

	<b>2021</b>	<b>2024</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>
<b>Ogden City</b>	1,831,472	1,887,665	1,991,352	2,153,508	2,278,618
<b>Salt Lake County</b>	31,163,465	31,892,811	35,548,352	39,567,354	42,600,730
<b>Davis County</b>	8,724,763	9,372,186	10,411,624	11,507,417	12,453,173
<b>Weber County</b>	5,502,705	5,665,134	6,108,741	6,769,241	7,301,225
<b>Box Elder County*</b>	2,150,397	2,226,867	2,469,230	2,888,821	3,362,191
<b>Tooele County*</b>	1,772,599	1,928,781	2,269,896	2,775,621	3,245,074

\*non-attainment portion of the county

**Table 2b****Vehicle Miles Traveled (HPMS Adjusted Average Summer Weekday)**

	<b>2021</b>	<b>2024</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>
<b>Salt Lake County</b>	34,977,247	35,587,921	39,623,309	43,957,099	47,241,871
<b>Davis County</b>	10,058,191	10,769,660	11,942,379	13,158,736	14,198,200
<b>Weber County</b>	6,472,502	6,618,305	7,130,873	7,910,633	8,532,464
<b>Tooele County*</b>	2,202,571	2,400,702	2,815,115	3,432,616	4,005,208

\*non-attainment portion of the county

**Peak and Off-Peak Trip Distribution**

The modeled VMT and the modeled vehicle speed depend on the number of vehicle trips assigned for each time period (AM, midday, PM, and evening) defined in the travel demand model. The percentage of trips by purpose varies for each time period. The percentages in Table 3 and Table 4 below are based on data from the 2012 Household Travel Survey.

**Table 3**  
**Percent of Trips by Time of Day**

<b>Trip Purpose</b>	<b>AM</b>	<b>Mid Day</b>	<b>PM</b>	<b>Evening</b>	<b>Grand Total</b>
Home Based - Other	11%	27%	24%	37%	100%
Home Based - Personal Business	9%	50%	25%	16%	100%
Home Based - School	40%	29%	26%	5%	100%
Home Based - Shopping	2%	43%	26%	29%	100%
Home Based - Work	35%	18%	28%	19%	100%
Non-home Based - Non-work	6%	46%	25%	23%	100%
Non-home Based - Work	13%	49%	29%	9%	100%
<b>Grand Total</b>	<b>15%</b>	<b>34%</b>	<b>26%</b>	<b>25%</b>	<b>100%</b>

**Table 4**  
**Percent of Trips by Purpose**

<b>Trip Purpose</b>	<b>AM</b>	<b>Mid Day</b>	<b>PM</b>	<b>Evening</b>	<b>Grand Total</b>
Home Based - Other	25%	26%	31%	50%	33%
Home Based - Personal Business	3%	8%	5%	4%	5%
Home Based - School	19%	6%	7%	1%	7%
Home Based - Shopping	1%	13%	10%	12%	10%
Home Based - Work	37%	8%	17%	12%	16%
Non-home Based - Non-work	7%	25%	18%	18%	19%
Non-home Based - Work	8%	13%	11%	3%	9%
<b>Grand Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

### Comparison of Modeled Speeds with Observed Data

WFRC strives for a high level of consistency between speeds predicted by its travel demand model and those observed in the real world. As part of WFRC's travel model's post-calibration validation process, observed travel speeds were collected in the Fall of 2018 and compared to speeds predicted by the Wasatch Front Travel Demand Model (v.8.3 beta).

Observations were collected for weekdays, from real time trip-routing web applications for the morning and evening peak travel periods for a set of 138 origin-destination pairs within the Wasatch Front region. Several web applications and data sources were evaluated before selecting the observed data source most consistent with real world experiences.

For the validation comparison, 43 trip origins, from traffic analysis zone (TAZ) centroids, were selected by staff, balancing the desires for region-wide coverage and trips volume representation. A set of up to 6 TAZ centroid destinations were selected for each trip origin point.

For each origin-destination pair, average trip speed was collected on the half-hour for each of the three peak hours of both the AM and PM periods. A weighted average of the hourly observed travel speeds for each peak period was calculated using observed travel volume as the weight factor.

Across the region, as shown in Table 5, averaged modeled trip speeds were 11% faster than the observed speed during the AM peak period and 6% faster during the PM peak period.

**Table 5**  
**WFRC Planning Area Modeled Speeds Compared to Observed Speeds**

	AM Peak	PM Peak
<b>Modeled Speeds (mph)</b>	41	36
<b>Observed Speeds (mph)</b>	37	34
<b>Percent Difference</b>	<b>11 %</b>	<b>6 %</b>

## C. Emission Modeling

### I/M Programs

Assumptions for the input files for EPA's MOVES vehicle emissions model include I/M programs in Salt Lake, Davis, and Weber Counties. Box Elder and Tooele Counties do not presently have I/M programs.

### VMT Mix

The VMT mix describes how much a particular vehicle type is used in the transportation network. While no longer a required input for the MOVES model as it was for MOBILE6.2, VMT mix is used in several instances to generate the input files required to run the MOVES model. The national default VMT mix found in the MOVES database was used to disaggregate local vehicle type data collected in 2017. The local vehicle type data is collected by UDOT as part of the federal HPMS data collection system and is based on automated counters which classify vehicles based on vehicle length. The UDOT classification is used to calculate control percentages for light duty (LD) vehicles and heavy duty (HD) vehicles for each facility type. The EPA default VMT mix is then applied to disaggregate the two UDOT control percentages into detailed percentages for the thirteen vehicle classes used in MOVES.

### Vehicle Weights

Facility specific VMT mix data described above was also used to estimate the average vehicle weight on each facility type. Since vehicle weight affects the rate of re-entrained road dust emissions estimated using the AP-42 method, vehicle weight variations on different facilities will affect the amount of fugitive dust created. The VMT mix for each facility type was used to estimate an average vehicle weight for each facility type with the following results:

<b><u>Facility</u></b>	<b><u>Average Vehicle Weight</u></b>
Urban - Freeway	6,500 lbs, or 3.25 tons
Urban - Arterial	6,100 lbs, or 3.05 tons
Urban - Local	3,900 lbs, or 1.95 tons

## **Post Model Adjustments**

For conformity analyses prior to 2000, the WFRC applied post model adjustments to vehicle emission estimates. Emission credits for work trips were modeled for reductions in single occupant vehicle rates based primarily on increased investments in transit service and rideshare programs, and the projected increase in telecommuting. Other less significant post model adjustments were also estimated for incident management, pavement re-striping, and signal coordination. Additional emission reducing programs and projects supported by CMAQ funds such as park and ride lots, bicycle facilities, transit vehicles, intelligent transportation systems (ITS), and intersection improvements have also been implemented.

WFRC believes that these programs have a positive effect in reducing vehicle emissions. In practice, however, WFRC has found that documenting the air quality benefits of these programs can be challenging. WFRC will continue to support these emission reduction programs, but credits from these programs have not been included in this conformity analysis.

## **MOVES Inputs**

The MOVES model is a very data intensive computer program based on the MariaDB software. Through the interagency consultation process the required MOVES inputs reflecting local conditions have been established.

Data files defining local conditions by county and year are required inputs to the MOVES model including vehicle population, emission testing programs, fuel supply, fuel formulation, meteorological conditions, and vehicle age. Vehicle population estimates are based on 2019 registration data by county and the estimated VMT for the same year. This vehicle population to VMT ratio is then applied to model projections of VMT to estimate future year vehicle population. By estimating vehicle population in this way the calculation considers the effects of human population and employment projections, as well as mode choice options that are included in the travel demand model.

Vehicle activity input files for the MOVES model are generated by the WFRC travel demand model using a customized in-house program for this purpose. The MOVES input files required include data for road distribution, speed distribution, and VMT by vehicle type for each county (Box Elder, Davis, Salt Lake, Tooele, and Weber) and analysis year as required for operating the MOVES model.

The input files listed above are read into the MOVES program as database files. The input database folders in Table 6 below contain the database files used for each county and year modeled using MOVES for this conformity analysis. The results of the MOVES model are stored in the output database “Conf21\_wt\_out” and “Conf21\_sm\_out” for each county and analysis year identified in Table 6.

**Table 6**  
**MOVES Data – Input Database Folders**

<b>Box Elder</b>	<b>Weber</b>	<b>Davis</b>	<b>Salt Lake</b>	<b>Tooele</b>	<b>Ogden</b>
Conf21_wt_be _2021_IN	Conf21_wt_we _2021_IN	Conf21_wt_da _2021_IN	Conf21_wt_sl _2021_IN	Conf21_wt_to _2021_IN	Conf21_wt_og _2021_IN
Conf21_wt_be _2024_IN	Conf21_wt_we _2024_IN	Conf21_wt_da _2024_IN	Conf21_wt_sl _2024_IN	Conf21_wt_to _2024_IN	Conf21_wt_og _2024_IN
Conf21_wt_be _2030_IN	Conf21_wt_we _2030_IN	Conf21_wt_da _2030_IN	Conf21_wt_sl _2030_IN	Conf21_wt_to _2030_IN	Conf21_wt_og _2030_IN
Conf21_wt_be _2040_IN	Conf21_wt_we _2040_IN	Conf21_wt_da _2040_IN	Conf21_wt_sl _2040_IN	Conf21_wt_to _2040_IN	Conf21_wt_og _2040_IN
Conf21_wt_be _2050_IN	Conf21_wt_we _2050_IN	Conf21_wt_da _2050_IN	Conf21_wt_sl _2050_IN	Conf21_wt_to _2050_IN	Conf21_wt_og _2050_IN
	Conf21_sm_we _2021a_IN	Conf21_sm_da _2021_IN	Conf21_sm_sl _2021_IN	Conf21_sm_to _2021_IN	
	Conf21_sm_we _2024_IN	Conf21_sm_da _2024_IN	Conf21_sm_sl _2024_IN	Conf21_sm_to _2024_IN	
	Conf21_sm_we _2030_IN	Conf21_sm_da _2030_IN	Conf21_sm_sl _2030_IN	Conf21_sm_to _2030_IN	
	Conf21_sm_we _2040_IN	Conf21_sm_da _2040_IN	Conf21_sm_sl _2040_IN	Conf21_sm_to _2040_IN	
	Conf21_sm_we _2050_IN	Conf21_sm_da _2050_IN	Conf21_sm_sl _2050_IN	Conf21_sm_to _2050_IN	

## Road Dust Estimates

In January 2011, the EPA released new guidance for estimating dust emissions from paved roads. These guidelines are published in Chapter 13.2.1 of the AP-42 document. The new formula is

$$E = k (sL)^{0.91} \times (W)^{1.02}$$

where: E = particulate emission factor (grams/mile),  
 k = particle size multiplier for particle size range and units of interest (for PM<sub>10</sub>, k=1.0 and for PM<sub>2.5</sub> k=0.25),  
 sL = road surface silt loading (grams per square meter - g/m<sup>2</sup>), and  
 W = average weight (tons) of the vehicles traveling the road.

Based on vehicle type counts on roads in the WFRC region, average vehicle weights for local roads, arterials, and freeways are 1.95, 3.05, and 3.25 tons respectively. The silt load (sL) factor varies by highway functional class and by traffic volume. The default silt load factors found in Table 13.2.1-2 of the AP-42 document are summarized below.

<b>Traffic Volume</b>	<b>Functional Class</b>	<b>Silt Load (grams/meter<sup>2</sup>)</b>
500-5,000	local roads	0.200
5,000-10,000	arterial roads	0.060
limited access	freeways	0.015

A precipitation reduction factor is also applied to the above equation using the following expression:

$$(1 - P/4N)$$

Where: P = number of "wet" days with at least 0.254 mm (0.01 in) of precipitation during the averaging period, and  
 N = number of days in the averaging period (e.g., 365 for annual, 91 for seasonal, 30 for monthly).

The AP-42 guidance recommends a value of 90 precipitation days per year for the Wasatch Front region. Using these values, the precipitation reduction factor yields a value of 0.9384. Combined with the basic road dust emission rate, the net PM<sub>2.5</sub> and PM<sub>10</sub> road dust factors by highway functional class are as follows:

<b>Functional Class</b>	<b>PM<sub>10</sub> Road Dust Rate (grams/mile)</b>	<b>PM<sub>2.5</sub> Road Dust Rate (grams/mile)</b>
local roads	0.429	0.107
arterials	0.226	0.057
freeways	0.068	0.017

## D. Conformity Determination

The following conformity findings for Amendment 3 of the 2019-2050 Regional Transportation Plan for the Wasatch Front are based on the transportation systems and planning assumptions described in this report and the EPA approved vehicle emissions model (MOVES3).

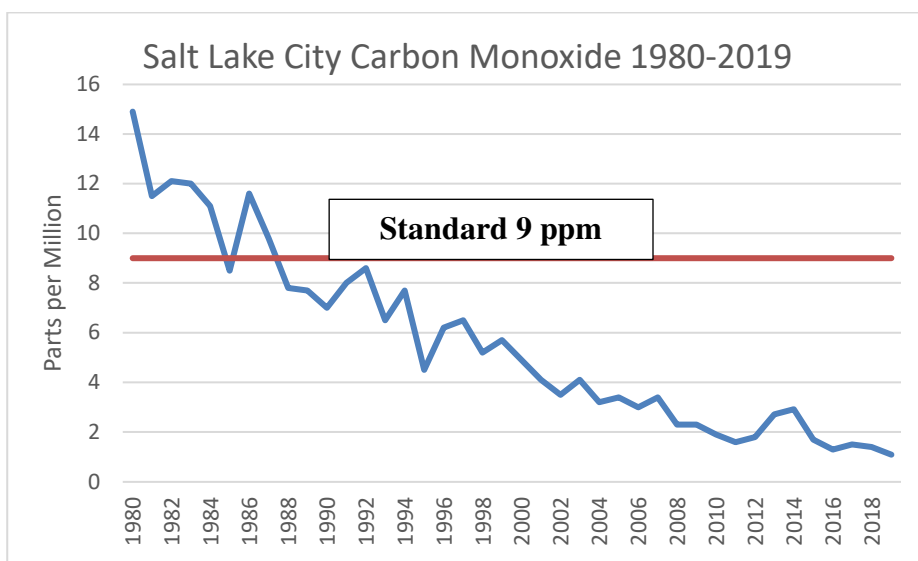
### Salt Lake City CO Conformity

Carbon monoxide levels in Salt Lake City have been at healthy levels for over 20 years which has resulted in the EPA removing the non-attainment designation. Salt Lake City was first designated as a non-attainment area for carbon monoxide in 1978. After 42 years of monitoring CO pollution, implementing vehicle emission testing, and adopting much improved vehicle emission standards, the air in Salt Lake City continues to be clear of unhealthy levels of carbon monoxide pollution.

The chart below shows the dramatic reductions in CO pollution in Salt Lake City since 1980. The EPA health standard for CO is 9 ppm. Salt Lake City has not exceeded that level since 1987.

This dramatic improvement in CO pollution is primarily due to improved vehicle emission standards and cleaner fuels. Before 1966, passenger cars and light duty trucks emitted about 80 grams/mile and 102 grams/mile of CO respectively. Following a series of vehicle emission standard improvements, the emission rate for both types of vehicles since 2006 now stands at 3.4 grams/mile for CO – a reduction of over 96%.

Over the years as older vehicles have been replaced with newer, cleaner vehicles the accumulated CO pollution has gone down steadily to the point that Salt Lake City carbon monoxide has remained in the healthy range for the last 33 years. Ogden City has also experienced decades of safe carbon monoxide levels and is on track to be designated in 2021 as attaining the CO health standard. Emissions of other pollutants such as nitrogen oxides and volatile organic compounds – precursor emissions to particulate pollution and ozone pollution – have likewise been reduced but more work remains for management of these pollutants.



Source: Second highest 8-hour observation. 1980-1994 EPA AIRS data for Salt Lake City, station unidentified; 1995-1996 Utah DAQ monitoring archive, Cottonwood station; 1997-2019 Utah DAQ monitoring archive, Hawthorne station.

### Ogden CO Conformity

The carbon monoxide maintenance plan for Ogden City was approved by EPA effective November 14, 2005 as recorded in the Federal Register (Vol. 70, No. 177, September 14, 2005). The maintenance plan defines a motor vehicle emission budget for the years 2005 and 2021 of 75.36 and 73.02 tons/day respectively. Table 8 below demonstrates that projected mobile source emissions are within the emission budget defined in the maintenance plan for the 2021 budget year. The other years listed in Table 8 are in accordance with requirements of the Conformity Rule (40 CFR Part 93) as noted in the table.

From this demonstration it is concluded that the 2019-2050 RTP conforms to the applicable controls and goals of the State Implementation Plan (Maintenance Plan) for Carbon Monoxide in Ogden City.

**Table 7**  
**Ogden City - CO**  
**Conformity Determination**

Year	<i>b</i> <b>2021</b>	<i>c</i> <b>2030</b>	<i>c</i> <b>2040</b>	<i>e</i> <b>2050</b>
<b>Budget<sup>#</sup> (tons/day)</b>	73.02	73.02	73.02	73.02
<i>emission rate (grams/mile)</i>	5.3896	2.4635	1.9217	1.8337
<i>seasonal VMT</i>	1,831,472	1,991,352	2,153,508	2,278,618
<b>Projection* (tons/day)</b>	10.88	5.41	4.56	4.61
<b>Conformity (Projection &lt; Budget)</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>

*b* - budget year, *c* - 10-year rule, *d* - no budget 5-year rule, *e* - last year of Plan,

<sup>#</sup> Federal Register Vol. 70 No. 177, September 14, 2005, Table V-2.

\* Projection = Emission Rate x Seasonal VMT / 453.6 grams per pound / 2,000 pounds per ton.

### **Ogden PM10 Conformity**

Ogden City was designated as a PM<sub>10</sub> non-attainment area in August of 1995 based on PM<sub>10</sub> violations in 1993 or earlier. Since a PM<sub>10</sub> SIP for Ogden has not yet been approved by EPA, it must be demonstrated that Ogden PM<sub>10</sub> emissions are either less than 1990 emissions or less than “no-build” emissions. The analysis years 2024, 2034, 2040, and 2050 were selected in accordance with the requirements of 40 CFR Section 93.119(e).

PM<sub>10</sub> emissions are present in two varieties referred to as primary and secondary PM<sub>10</sub>. Primary PM<sub>10</sub> consists mostly of fugitive road dust but also includes particles from brake wear and tire wear and some “soot” particles emitted directly from the vehicle tailpipe. The methods defined in the January 2011 version of the EPA publication known as “AP-42” were used to estimate dust from paved roads. Secondary PM<sub>10</sub> consists of gaseous tailpipe emissions that take on a particulate form through subsequent chemical reactions in the atmosphere. Nitrogen oxides are the main component of secondary PM<sub>10</sub> emissions with sulfur oxides a distant second.

As summarized in Tables 8a and 8b, emission estimates for the 2019-2050 RTP satisfy the “Build < 1990” test for secondary PM<sub>10</sub> (NO<sub>x</sub> precursors) and primary PM<sub>10</sub> (direct tailpipe particulates, brake wear, tire wear, and road dust) in Ogden City. The 1990 emission estimates based on the Mobile6.2 vehicle emissions model for the 2003 conformity analysis have been updated for this conformity analysis using the MOVES model and the January 2011 AP-42 road dust methodology for consistency with current emission modeling requirements. Specifically, the NO<sub>x</sub> precursor budget (1990 emission estimate) changes from 4.57 tons/day to 6.92 tons/day, and the direct PM<sub>10</sub> budget (1990 estimate) changes from 2.28 tons/day to 1.28 tons/day. The 1990 primary PM<sub>10</sub> estimate for Ogden City includes emissions from the unpaved access road to the Ogden landfill which was closed in 1998.

For projections of primary PM<sub>10</sub> emissions, no credit was taken for a number of programs adopted since Ogden City last violated the PM<sub>10</sub> standard. These particulate reducing programs include covered load ordinances, increased frequency of street sweeping, and reduced application of deicing and skid resistant materials (salt and sand). Documentation of these programs has been provided by Ogden City but the actual benefits of these programs are not included in the emission projections below. Other areas that have estimated the benefit of these programs have found a silt load reduction of over 30% for effective street sweeping programs and a 5% silt load reduction when limiting the amount of sand and salt applied to the roads. Ogden City has also implemented a number of specific projects that have a positive effect in reducing particulate emissions including park and ride lots, storm water improvements, shoulder widening and edge striping, and addition of curb and gutter on several roadways.

From this demonstration it is concluded that the 2019-2050 RTP conforms under the Emission Reductions Criteria for areas without motor vehicle emissions budgets for PM<sub>10</sub> in Ogden City.

Table 8a

**Ogden City - PM10 (NO<sub>x</sub> Precursor)  
Conformity Determination**

Year	<sup>d</sup> 2024	<sup>c</sup> 2030	<sup>c</sup> 2040	<sup>e</sup> 2050
<b>1990 Emissions (tons/day)</b>	6.92	6.92	6.92	6.92
<i>emission rate (grams/mile)</i>	0.6673	0.4533	0.3503	0.3342
<i>seasonal VMT</i>	1,887,665	1,991,352	2,153,508	2,278,618
<b>Projection* (tons/day)</b>	1.39	0.99	0.83	0.84
<b>Conformity (Projection &lt; 1990 Emissions)</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>

*c* - 10-year rule, *d* - no budget 5-year rule, *e* - last year of Plan,

\* Projection = Emission Rate x Seasonal VMT / 453.6 grams per pound / 2,000 pounds per ton.

Table 8b

**Ogden City - PM10 (Primary Particulates\*\*)  
Conformity Determination**

Year	<sup>c</sup> 2021	<sup>c</sup> 2030	<sup>c</sup> 2040	<sup>e</sup> 2050
<b>1990 Emissions (tons/day)</b>	1.28	1.28	1.28	1.28
<i>emission rates (grams/mile)</i>				
<i>total exhaust particulates</i>	0.0282	0.0164	0.0127	0.0125
<i>brake particulates</i>	0.0630	0.0518	0.0517	0.0528
<i>tire particulates</i>	0.0128	0.0124	0.0123	0.0123
<i>road dust particulates</i>	0.2672	0.2664	0.2640	0.2629
<i>seasonal VMT</i>	1,831,472	1,991,352	2,153,508	2,278,618
<b>Projection* (tons/day)</b>	0.75	0.76	0.81	0.86
<b>Conformity (Projection &lt; 1990 Emissions)</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>

\*\* Includes total PM10 exhaust particulates, road dust, tire wear, and brake wear.

*c* - 10-year rule, *d* - no budget 5-year rule, *e* - last year of Plan,

\* Projection = Emission Rate x Seasonal VMT / 453.6 grams per pound / 2,000 pounds per ton.

**Salt Lake County PM<sub>10</sub> Conformity**

The PM<sub>10</sub> SIP for Salt Lake County does not define a budget beyond the year 2003. Therefore, conformity tests are required only for analysis years which are identified in accordance with 40 CFR 93.118. All analysis years after 2003 must meet the 2003 budgets for primary particulates and secondary particulates (see the discussion above under Ogden PM<sub>10</sub> Conformity for an explanation of primary and secondary PM<sub>10</sub> emissions). The State air quality rule R307-310 allows a portion of the surplus primary PM<sub>10</sub> budget to be applied to the secondary PM<sub>10</sub> budget for conformity purposes. However, for the analysis years, 2021, 2030, 2040 and 2050, no budget adjustments were necessary.

**Table 9**  
**Salt Lake County - PM<sub>10</sub> Budgets**  
**Direct (Dust) and Precursor (NO<sub>x</sub>) PM<sub>10</sub> Emission Budgets**  
(tons/day)

<b>Year</b>	<b>2021</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>
<b>Total PM<sub>10</sub> Budget</b>	72.60	72.60	72.60	72.60
<i>Direct PM<sub>10</sub> Budget to be Traded</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>	<i>0.00</i>
<b>Direct PM<sub>10</sub> Budget</b>	40.30	40.30	40.30	40.30
<b>NO<sub>x</sub> Precursor PM<sub>10</sub> Budget</b>	32.30	32.30	32.30	32.30

Table 10a and Table 10b below demonstrate that projected mobile source emissions are within the emission budget defined in the SIP. The years listed in Table 10a and Table 10b are in accordance with requirements of the Conformity Rule (40 CFR Part 93) as noted in the tables.

From this demonstration it is concluded that the 2019-2050 RTP conforms to the applicable controls and goals of the State Implementation Plan for PM<sub>10</sub> in Salt Lake County.

**Table 10a**  
**Salt Lake County - PM10 (NOx Precursor)**  
**Conformity Determination**

	<sup>c</sup>	<sup>c</sup>	<sup>c</sup>	<sup>e</sup>
<b>Year</b>	<b>2021</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>
<b>Budget (tons/day)</b>	32.30	32.30	32.30	32.30
<i>emission rate (grams/mile)</i>	<i>0.6167</i>	<i>0.2854</i>	<i>0.2179</i>	<i>0.2060</i>
<i>seasonal VMT</i>	<i>31,163,465</i>	<i>35,548,352</i>	<i>39,567,354</i>	<i>42,600,730</i>
<b>Projection* (tons/day)</b>	21.19	11.18	9.50	9.67
<b>Conformity (Projection &lt; Budget)</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>

*c* - 10-year rule, *e* - last year of Plan,

# WFRM Memo to Jeff Houk of EPA, April 15, 1994.

\* Projection = Emission Rate x Seasonal VMT / 453.6 grams per pound / 2,000 pounds per ton.

**Table 10b**  
**Salt Lake County - PM10 (Primary Particulates\*\*)**  
**Conformity Determination**

	<sup>c</sup>	<sup>c</sup>	<sup>c</sup>	<sup>e</sup>
<b>Year</b>	<b>2021</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>
<b>Budget (tons/day)</b>	40.30	40.30	40.30	40.30
<i>emission rates (grams/mile)</i>				
<i>total exhaust particulates</i>	<i>0.0287</i>	<i>0.0096</i>	<i>0.0091</i>	<i>0.0100</i>
<i>brake particulates</i>	<i>0.0462</i>	<i>0.0324</i>	<i>0.0326</i>	<i>0.0330</i>
<i>tire particulates</i>	<i>0.0112</i>	<i>0.0032</i>	<i>0.0101</i>	<i>0.0102</i>
<i>road dust particulates</i>	<i>0.2031</i>	<i>0.1931</i>	<i>0.1897</i>	<i>0.1893</i>
<i>seasonal VMT</i>	<i>31,163,465</i>	<i>35,548,352</i>	<i>39,567,354</i>	<i>42,600,730</i>
<b>Projection* (tons/day)</b>	9.93	9.34	10.53	11.38
<b>Conformity (Projection &lt; Budget)</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>

\*\* Includes total PM10 exhaust particulates, road dust, tire wear, and brake wear.

# WFRM Memo to Jeff Houk of EPA, April 15, 1994.

*c* - 10-year rule, *e* - last year of Plan,

\* Projection = Emission Rate x Seasonal VMT / 453.6 grams per pound / 2,000 pounds per ton.

### Salt Lake PM<sub>2.5</sub> Conformity

Davis, Salt Lake, and portions of Weber, Tooele, and Box Elder Counties have been designated as a maintenance area under the new PM<sub>2.5</sub> standard (35 µg/m<sup>3</sup>) that was established in 2006. As reported in the November 6, 2020 Federal Register, EPA approved the following motor vehicle

emission budgets for the Salt Lake PM<sub>2.5</sub> area effective in 2035 and thereafter: 21.63 tpd of NO<sub>x</sub>, 20.57 tpd of VOC, and 1.38 tpd of direct PM<sub>2.5</sub>.

For years prior to 2035 no motor vehicle emission budget is specified. It is expected, however, that a qualitative assessment of emission reductions be provided for these intervening years. As part of this qualitative assessment, Tables 11a-11c below include a comparison of projected emissions for select years prior to 2035 and compares those emissions to 2008 levels which was the previous interim conformity test. Since 2008, emissions related to PM<sub>2.5</sub> pollution have been reduced by half or more. The VMT estimates found in Tables 11a-11c reflect the strong economic growth anticipated in the region and there is no reason to expect a dramatic increase in VMT growth beyond these estimates which could bring into question the emission projections.

Table 11a below demonstrates that projected mobile source emissions of NO<sub>x</sub> (a precursor to PM<sub>2.5</sub> emissions) in the five-county PM<sub>2.5</sub> non-attainment area are less than 2008 NO<sub>x</sub> emissions prior to 2035, and less than the approved budget after 2035. Table 11b below demonstrates that projected mobile source emissions of VOC (also a precursor to PM<sub>2.5</sub> emissions) in the five-county PM<sub>2.5</sub> non-attainment area are less than 2008 VOC emissions prior to 2035, and less than the approved budget after 2035. Table 11c below demonstrates that direct particle emissions of PM<sub>2.5</sub> in the five-county PM<sub>2.5</sub> non-attainment area are also less than 2008 direct particle emissions prior to 2035, and less than the approved budget after 2035. Direct particle emissions include exhaust emissions of elemental carbon, organic carbon, and sulfates (SO<sub>4</sub>); and mechanical emissions from brake wear and tire wear.

From this demonstration it is concluded that the RTP conforms under the interim conformity guidelines for PM<sub>2.5</sub> areas without an approved motor vehicle emissions budget for the Salt Lake PM<sub>2.5</sub> non-attainment area.

**Table 11a**

**Salt Lake Area<sup>#</sup> - PM<sub>2.5</sub> (NO<sub>x</sub> Precursor)  
Conformity Determination**

	<sup>c</sup>	<sup>c</sup>	<sup>c</sup>	<sup>c</sup>	<sup>e</sup>
<b>Year</b>	<b>2021</b>	<b>2024</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>
<b>2008 Emissions (tons/day)</b>	97.98	97.98	97.98	--	--
<b>Budget<sup>#</sup> (tons/day)</b>	--	--	--	21.63	21.63
<i>emission rate (grams/mile)</i>	<i>0.6987</i>	<i>0.4911</i>	<i>0.3268</i>	<i>0.2515</i>	<i>0.2397</i>
<i>seasonal VMT</i>	<i>49,313,929</i>	<i>51,085,779</i>	<i>56,807,842</i>	<i>63,508,455</i>	<i>68,962,394</i>
<b>Projection* (tons/day)</b>	37.98	27.65	20.46	17.61	18.22
<b>Conformity (Projection &lt; 2008 Emissions or &lt; Budget)</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>

<sup>#</sup> Salt Lake PM<sub>2.5</sub> Non-Attainment Area includes: Davis, Salt Lake, and portions of Weber, Box Elder and Tooele Counties.

<sup>c</sup> - 10-year rule, <sup>e</sup> - last year of Plan,

\* Projection = Emission Rate x Seasonal VMT / 453.6 grams per pound / 2,000 pounds per ton.



Table 11b

**Salt Lake Area<sup>#</sup> - PM2.5 (VOC Precursor)  
Conformity Determination**

	<i>c</i>		<i>c</i>	<i>c</i>	<i>e</i>
<b>Year</b>	<b>2021</b>	<b>2024</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>
<b>2008 Emissions (tons/day)</b>	61.35	61.35	61.35	--	--
<b>Budget<sup>#</sup> (tons/day)</b>	--	--	--	20.57	20.57
<i>emission rate (grams/mile)</i>	<i>0.5081</i>	<i>0.2489</i>	<i>0.1887</i>	<i>0.1666</i>	<i>0.1632</i>
<i>seasonal VMT</i>	<i>49,313,929</i>	<i>51,085,779</i>	<i>56,807,842</i>	<i>63,508,455</i>	<i>68,962,394</i>
<b>Projection* (tons/day)</b>	27.62	14.02	11.81	11.66	12.41
<b>Conformity (Projection &lt; 2008 Emissions or &lt; Budget)</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>

<sup>#</sup> Salt Lake PM2.5 Non-Attainment Area includes: Davis, Salt Lake, and portions of Weber, Box Elder and Tooele Counties.

*c* - 10-year rule, *e* - last year of Plan,

\* Projection = Emission Rate x Seasonal VMT / 453.6 grams per pound / 2,000 pounds per ton.

Table 11c

**Salt Lake Area<sup>#</sup> - PM2.5 (Direct PM Emissions\*\*)  
Conformity Determination**

	<i>c</i>	<i>c</i>	<i>c</i>	<i>c</i>	<i>e</i>
<b>Year</b>	<b>2021</b>	<b>2024</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>
<b>2008 Emissions (tons/day)</b>	4.77	4.77	4.77	--	--
<b>Budget<sup>#</sup> (tons/day)</b>	--	--	--	1.38	1.38
<i>emission rate (grams/mile)</i>	<i>0.0359</i>	<i>0.0219</i>	<i>0.0149</i>	<i>0.0143</i>	<i>0.0146</i>
<i>seasonal VMT</i>	<i>49,313,929</i>	<i>51,085,779</i>	<i>56,807,842</i>	<i>63,508,455</i>	<i>68,962,394</i>
<b>Projection* (tons/day)</b>	1.95	1.23	0.94	1.00	1.11
<b>Conformity (Projection &lt; 2008 Emissions or &lt; Budget)</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>

<sup>#</sup> Salt Lake PM2.5 Non-Attainment Area includes: Davis, Salt Lake, and portions of Weber, Box Elder and Tooele Counties.

*c* - 10-year rule, *e* - last year of Plan,

\* Projection = Emission Rate x Seasonal VMT / 453.6 grams per pound / 2,000 pounds per ton.

\*\* Direct PM for conformity includes total PM2.5 exhaust particulates, brake wear, and tire wear. Road dust is excluded.

### Northern Wasatch Front Ozone Conformity

A new ozone standard of 70 ppb was approved October 2015. The Northern Wasatch Front Area was designated as a marginal non-attainment area for ozone by EPA effective December 2018. The Northern Wasatch Front Area includes Salt Lake and Davis Counties, and portions of Weber and Tooele Counties. Pending development and approval of a State Implementation Plan for ozone, interim conformity is based on future ozone precursor emissions being less than the 2017 base year.

Table 12a below demonstrates that projected mobile source emissions of NO<sub>x</sub> (a precursor to ozone emissions) in the four-county ozone non-attainment area are less than 2017 NO<sub>x</sub> emissions. Table 12b below demonstrates that projected mobile source emissions of VOC (also a precursor to ozone emissions) in the four-county ozone non-attainment area are less than 2017 VOC emissions.

From this demonstration it is concluded that the RTP conforms under the interim conformity guidelines for ozone areas without an approved motor vehicle emissions budget for the Northern Wasatch Front Area ozone non-attainment area.

**Table 12a**

### Northern Wasatch Front Ozone# - NO<sub>x</sub> Precursor Conformity Determination

	<i>c</i>	<i>c</i>	<i>c</i>	<i>c</i>	<i>e</i>
<b>Year</b>	<b>2021</b>	<b>2024</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>
<b>2017 Emissions (tons/day)</b>	48.64	48.64	48.64	48.64	48.64
<i>emission rate (grams/mile)</i>	<i>0.5756</i>	<i>0.4173</i>	<i>0.2821</i>	<i>0.2099</i>	<i>0.1991</i>
<i>seasonal VMT</i>	<i>53,710,512</i>	<i>55,376,589</i>	<i>61,511,677</i>	<i>68,459,086</i>	<i>73,977,744</i>
<b>Projection* (tons/day)</b>	34.08	25.47	19.13	15.84	16.23
<b>Conformity (Projection &lt; 2017 Emissions)</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>

# Northern Wasatch Front Ozone Non-Attainment Area includes: Davis, Salt Lake, and portions of Weber and Tooele Counties.

*c* - 10-year rule, *e* - last year of Plan,

\* Projection = Emission Rate x Seasonal VMT / 453.6 grams per pound / 2,000 pounds per ton.

Table 12b

**Northern Wasatch Front Ozone# - VOC Precursor  
Conformity Determination**

	<i>c</i>	<i>c</i>	<i>c</i>	<i>c</i>	<i>e</i>
<b>Year</b>	<b>2021</b>	<b>2024</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>
<b>2017 Emissions (tons/day)</b>	28.69	28.69	28.69	28.69	28.69
<i>emission rate (grams/mile)</i>	<i>0.3559</i>	<i>0.1939</i>	<i>0.1177</i>	<i>0.0921</i>	<i>0.0856</i>
<i>seasonal VMT</i>	<i>53,710,512</i>	<i>55,376,589</i>	<i>61,511,677</i>	<i>68,459,086</i>	<i>73,977,744</i>
<b>Projection* (tons/day)</b>	21.07	11.83	7.98	6.95	6.98
<b>Conformity (Projection &lt; 2017 Emissions)</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>	<b>Pass</b>

# Northern Wasatch Front Ozone Non-Attainment Area includes: Davis, Salt Lake, and portions of Weber and Tooele Counties.

*c* - 10-year rule, *e* - last year of Plan,

\* Projection = Emission Rate x Seasonal VMT / 453.6 grams per pound / 2,000 pounds per ton.

## **Appendix – 1**

### **Definition of Regionally Significant Projects**

**Process for Determining Regionally Significant Facilities  
for Purposes of Regional Emissions Analysis (see CFR 93.105.2.c.1.ii)**

Background: 40 CFR 93.101 defines “regionally significant project” and associated facilities for the purpose of transportation conformity. The federal definition does not specifically include minor arterials. The following definitions and processes will be used by the Wasatch Front Regional Council (WFRC) and Mountainland Association of Governments (MAG) in consultation with DAQ, UDOT, UTA, FHWA, FTA, and EPA to determine which facilities shall be considered regionally significant for purposes of regional emissions analysis. It is the practice of the MPO to include minor arterials and collectors in the travel model for the purpose of accurately modeling regional VMT and associated vehicle emissions. The inclusion of minor arterials and collectors in the travel model, however, does not identify these facilities as regionally significant.

1. Any new or existing facility with a functional classification of principal arterial or higher on the latest UDOT Functional Classification Map shall be considered regionally significant (see <https://www.arcgis.com/home/webmap/viewer.html?webmap=494d57208ea4464bb664ac2da38f9c91&extent=-116.9385,35.9224,-106.1719,42.8498>).
2. Any fixed guide-way transit service including light rail, commuter rail, or portions of bus rapid transit that involve exclusive right-of-way shall be considered regionally significant.
3. As traffic and land use conditions change in the future, the MPO’s - in consultation with DAQ, UDOT, FHWA, and EPA - will consider 1) the relative importance of minor arterials serving major activity centers, and 2) the absence of principal arterials in the vicinity to determine if any minor arterials in addition to those listed in Exhibit A should be considered as regionally significant for purposes of regional emissions analysis.

**Exhibit A**  
**Minor Arterials Determined to be Regionally Significant**  
**for Purposes of Regional Emissions Analysis**

40 FR 93.105(c)(ii), “Consultation – Interagency consultation procedures: Specific processes” specifies that Interagency Consultation shall include a process to identify which minor arterials should be considered as “regionally significant” for the purpose of regional emissions analysis. In consultation with DAQ, UDOT, FHWA, and EPA; and based on inspection and engineering judgment of current traffic conditions; and based on application of the “Process for Determining Regionally Significant Facilities for Purposes of Regional Emissions Analysis” agreed upon by the aforementioned agencies; the WFRC designated eight minor arterials as regionally significant.

Since 2015, all but one of the minor arterials referenced above have been reclassified with the functional type of principal arterial and are therefore by definition regionally significant. The remaining minor arterial to be considered as regionally significant for emissions analysis is listed below. It should also be noted that all collectors, minor arterials, and principal arterials are included in the highway network used in the WFRC travel demand model.

**Davis County**

none

**Salt Lake County**

none

**Weber County**

SR-79 (Hinckley Drive): SR-108 to I-15

**Process for Determining Significant Change in Design Concept and Scope  
for Purposes of Regional Emissions Analysis (see CFR 93.105.2.c.1.ii)**

Changes to regionally significant projects may or may not necessitate a new regional emissions analysis. The following definitions and processes will be used to determine what changes to project concept and scope are to be considered significant or not for purposes of regional emissions analysis.

1. Adding or extending freeway auxiliary lanes or weaving lanes between interchanges is not considered a significant change in concept and scope since these lanes are not normally included in the travel model.
2. Adding or extending freeway auxiliary/weaving lanes from one interchange to a point beyond the next interchange is considered a significant change in concept and scope.
3. A change to a regionally significant project defined in the Regional Transportation Plan that does not change how the project is defined in the travel model is not considered a significant change in concept and scope. These changes include but are not limited to lane or shoulder widening, cross section (other than the number of through lanes), alignment, interchange configuration, intersection traffic control, turn lanes, continuous or center turn lanes, and storage lanes.
4. A change to a regionally significant project defined in the Regional Transportation Plan that does alter the number of through lanes, lane capacity, or speed classification as defined in the travel model is considered a significant change in concept and scope.
5. Advancing or delaying the planned implementation of a regionally significant project that does not result in a change in the transportation network described in the travel model for any horizon year (as defined in CFR 93.101) is not considered a significant change in concept and scope.
6. Advancing or delaying the planned implementation of a regionally significant project that does result in a change in the transportation network described in the travel model for any horizon year (as defined in CFR 93.101) is considered a significant change in concept and scope.
7. Project changes not addressed in the above statements will be decided on a case by case basis through consultation by representatives from DAQ, WFRC, MAG, UDOT, UTA, FHWA, FTA, and EPA.

**Appendix-2**  
**RTP 2019-2050 – Amendment 3 Projects**

PROJECT NUMBER	PROJECT CORRIDOR	PROJECT EXTENTS	PROJECT TYPE	LEVEL	AGENCY
N/A	3 Gate Rail Trail	Roy HAFB Gate to Clearfield West HAFB Gate	New regional active transportation project	Level 1	MIDA
N/A	Sandy Active Transportation Plan	City-wide	New regional active transportation plan	Level 2	Sandy
N/A	West Jordan Active Transportation Plan	City-wide	New regional active transportation plan	Level 2	West Jordan
N/A	Draper Active Transportation Plan	City-wide	New regional active transportation plan	Level 2	Draper
N/A	Murray Fashion Place Mall Center	Fashion Place Employment District	Center modification	Level 2	Murray
R-B-15	Forest Street RR Crossing	@ 900 West RR Crossing	Move from Phase 3 to Phase 1	Level 2	Brigham City
R-D-44	South Bench Drive	I-84 to South Weber Drive	Alignment change	Level 2	South Weber
R-D-47	South Bench Drive	South Weber Drive to Fairfield Road	Project removal	Level 2	South Weber
R-S-46	7800 South	MVC and SR-111	Move from Phase 3 to Phase 1	Level 2	West Jordan
T-W-1, T-D-2, T-S-1	Double Tracking FrontRunner	Spot locations	Move from Phase 2 to Phase 1	Level 3	UTA
T-S-17/T-S-19	S-line Streetcar Extension	McClelland to Highland Drive	Move a portion from Unfunded to Phase 1	Level 3	UTA
R-W-77	I-15 Interchange	@ 5600 South	Update costs	Level 3	UDOT
R-D-53	I-15	Farmington to SLCo Line	Move from Phase 3 to Phase 1	Level 3	UDOT
R-S-137	I-15	Davis Co Line to 600 N	Move from Phase 3 to Phase 1	Level 3	UDOT
R-S-102	Mountain View Corridor	Old Bingham Hwy to 13400 South	Move from Phase 2 to Phase 1 and update extents	Level 3	UDOT
R-D-51	I-15	2600 South to SLCo Line	Delete	Level 3	UDOT
R-S-133	I-15 Northbound	2100 South to Bangerter Hwy	Update extents and costs	Level 3	UDOT
R-S-134	I-15 Collector and Distributors (North Bound)	I-215 to Bangerter Hwy	Update extents and costs	Level 3	UDOT
R-S-188	Bangerter Hwy Interchange (Upgrade)	@ SR-201	Delete	Level 3	UDOT

R-S-97	Mountain View Corridor	13400 South to Utah Co. Line	Update extents and costs	Level 3	UDOT
R-W-82	US-89 Interchange	@ I-84	Scope change and costs	Level 3	UDOT
R-W-83	US-89 Interchange	@ I-84	Move System-to-System to Phase 2 - costs update, new project number	Level 3	UDOT

**DATE:** August 19, 2021  
**AGENDA ITEM:** 6  
**SUBJECT:** WFRF Funding Opportunities for Local Governments  
**PREPARED BY:** Wayne Bennion

**BACKGROUND:**

The Wasatch Front Regional Council administers six programs that provide resources for local governments, totaling approximately \$40 million annually. These programs include:

- Surface Transportation Program (STP)
- Congestion Mitigation Air Quality (CMAQ)
- Transportation Alternatives Program (TAP)
- Transportation and Land Use Connection (TLC)
- Community Development Block Grant (CDBG)
- Wasatch Front Economic Development District (WFEDD)

A presentation will be given briefly describing these programs, to increase awareness of funding and resource opportunities, as well as to encourage efficiency and coordination among the programs for applicants.

**RECOMMENDATION:**

This is an information item only.

**CONTACT PERSON:**

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