

Regional Council Meeting

At or after 12 p.m., Thursday, January 25, 2024

Pima Association of Governments
1 E. Broadway Blvd., Suite 401, Tucson

Public Access to Meeting Audio/Presentations: [Live Video Link \(YouTube\)](#)

Notice is hereby given to the public and to the Council's members that the Regional Council of Pima Association of Governments will have a meeting at the above stated time and location. The following is an agenda of the matters to be considered, discussed and acted upon.

The meeting room will be open to the public. Members of the public are invited to attend the meeting via the public access link above. Members of the Council may attend the meeting in-person or remotely. Regional Council members will be provided with a separate link to participate remotely, as needed.

Members of the public may submit written comments relating to this meeting to info@PAGregion.com within one hour of the posted start time for the meeting. These comments will be filed with the meeting's records.

Alternatively, a virtual call-in option subject to technological availability may be available for comments under the Call to the Audience item on the PAG Regional Council meeting agenda. Interested members of the public must email info@PAGregion.com or call (520) 792-1093 at least 24 hours prior to the start of the meeting to confirm your interest in participating in the virtual Call to the Audience.

The Council may vote to go into Executive Session on any agenda item for discussion and consultation for legal advice with its attorney on any matter(s) as set forth on the agenda, pursuant to A.R.S. § 38-431.03(A)(3).

Council Description: *Develop, adopt and/or endorse policies, plans, reports and other submittals related to regional problems and needs that require action on an areawide or regional basis, including air quality, water quality, transportation, land use and human services. Involve local and state governments in a voluntary and cooperative manner to develop regional solutions. Act in its capacity as the federally designated metropolitan planning organization and as the U.S. Environmental Protection Agency-designated lead agency for air, water quality and regional solid waste planning for the greater Tucson region.*

"We encourage and uphold the importance of regional collaboration as the PAG Regional Council addresses regional priorities and pursues regional solutions."

To view the full Regional Collaboration and Unity Pledge, visit PAGregion.com/pledge

AGENDA

1. **Call to Order**
2. **Pledge of Allegiance**
3. **Election of Officers**

Article VII, Section 1, of the bylaws of Pima Association of Governments (PAG) and Section VIII of the Articles of Incorporation state that the following officers shall be elected annually: Chair, Vice Chair and Treasurer. Therefore, it is necessary to elect these officers to serve until January 2025.

Action: The Regional Council will be asked to elect the suggested slate of officers for 2024 as detailed in the meeting packet materials.

4. **Call to the Audience (Remote Access Option)**

Speakers are limited to a three-minute oral presentation, subject to technological availability, and may submit written comments of any length for the Council's files. The Call to the Audience is limited to 30 minutes. Those wishing to address the Council should follow the instructions above under the Special Notice prior to the meeting to specify the topic to be addressed. Individual Council members may respond to criticism made by those individuals who have addressed the Council and may ask staff to review a matter. However, the Council will not discuss or act on a matter raised during a Call to the Audience that is not already on the agenda.

Prior to making comments, we ask speakers to disclose if they are representing or speaking on behalf of another person or entity.

5. **Approval of the Dec. 7, 2023, Meeting Summary and Executive Session Minutes**

The Regional Council will consider corrections and may amend the draft meeting summary prior to approval during the meeting.

Action: The Regional Council will be asked to approve the Dec. 7, 2023, Meeting Summary and Executive Session Minutes.

6. **Consent Agenda Items for Information:**

Staff are available to report on any of these items upon request.

- a. **Program Highlights Report**
- b. **Contracts and Agreements Report**

This is an information item.

7. PAG Regional Active Transportation Plan Contract

Staff will provide the Regional Council with information on the PAG Regional Active Transportation Plan. PAG has solicited to contract services to complete the plan and has selected a consultant on a qualifications-based process.

Action: The Regional Council will be asked to authorize the executive director to execute a contract between PAG and Kimley-Horn to complete the Regional Active Transportation Plan to inform the federally required regional long-range transportation plan update.

8. Dynamic Traffic Assignment Model Contract

In accordance with the adopted FY2020-2021 OWP Table 6, listed as “Modeling support services”, PAG underwent a rigorous technical review and procured a DTA model software. Further refinement of the DTA model is recommended to leverage its benefits and accurately depict individual vehicle behavior as enhancing travel demand modeling and supporting air quality analyses.

Action: The Regional Council will be asked to authorize the executive director to negotiate and execute a contract on PAG's Dynamic Traffic Assignment (DTA) model development and implementation with the amount not to exceed \$200,000.

9. Arizona Department of Transportation (ADOT) Safety Performance Projections for 2024

Staff will provide the Regional Council with a presentation on ADOT's 2024 safety performance projections.

Action: The Regional Council will be asked to adopt ADOT's Safety Performance Projections for 2024.

10. FY 2022-FY 2026 PAG Transportation Improvement Program (TIP) Amendment #2022.090

Staff will provide details on TIP Amendment #2022.090 as provided in the meeting materials.

Action: The Management Committee will be asked to recommend approval of an amendment to the PAG FY 2022 - FY 2026 Transportation Improvement Program (TIP), which would adjust the programming of Arizona Department of Transportation (ADOT) funds on two ADOT projects.

11. FY 2025 – FY 2029 PAG Transportation Improvement Program (TIP) Development Progress Update and Review of any Available Draft Project Lists

Staff will provide the Regional Council with an update on the development of the TIP.

This is an information item.

12. Regional Mobility and Accessibility Plan (RMAP) Development Update

Staff will provide the Regional Council with an update on the development of the 2055 RMAP, which is PAG’s long-range transportation plan.

This is an information item.

13. Regional Transportation Revenues Update

Staff will provide the Regional Council with a report on regional transportation revenue information referenced in the agenda item memo.

This is an information item.

14. Carbon Reduction Strategies Update

Staff will provide the Regional Council with an update on the state’s Carbon Reduction Strategies and Target development in compliance with recent federal laws and alignment of PAG’s adopted strategies with the state’s goals and objectives.

This is an information item.

15. Adjournment

The Regional Council meeting packet containing material related to the meeting is available at: <https://pagregion.com/get-involved/events/> for public review. In compliance with the Americans with Disabilities Act (ADA), those requiring special assistance, such as large typeface print, sign language or other reasonable accommodations, may request those through the administrative offices at: (520) 792-1093, at least two business days before the meeting.

PAG operates its programs without regard to race, color and national origin in compliance with [Title VI](#) of the Civil Rights Act. We invite you to complete our voluntary self-identification survey ([English/Spanish](#)).

If you need translation assistance, please call (520) 792-1093 and ask for Zonia Kelley. Si necesita ayuda con traducción, llame por favor al (520) 792-1093 y comuníquese con Zonia Kelley.

Communication #3781

SUBJECT: Election of Officers

Meeting	Meeting Date	Agenda Category	Agenda Item #
Regional Council	January 25, 2024	Action	3

REQUESTED ACTION/SUGGESTED MOTION

The Regional Council will be asked to elect the suggested slate of officers for 2024 as recommended by the current PAG/RTA Chairs.

Chair:	Rex Scott, Supervisor
Vice Chair:	Paul Diaz, Mayor
Treasurer:	Ed Honea, Mayor

ASSOCIATED OWP WORK ELEMENT/GOAL

None.

SUMMARY

Article VII, Section 1, of the bylaws of Pima Association of Governments (PAG) and Section VIII of the Articles of Incorporation state that the following officers shall be elected annually: Chair, Vice Chair and Treasurer. Therefore, it is necessary to elect these officers to serve until January 2025.

The established practice for conducting PAG officer elections includes preparing a slate of officers for annual elections with a recommended slate from the current Chairs.

From year to year, the slate typically rotates up, so that the Vice Chair becomes the Chair and the Treasurer becomes the Vice Chair on the PAG Regional Council.

The Treasurer position typically brings on a new officer while the former Chair moves off the Regional Council officers' rotation.

This election pattern has been established to have those with more institutional knowledge serve in the officer positions as newer members become more familiar with the policies and practices of the organization, which have different regulations and laws they must follow than jurisdictions do.

Communication #3782

SUBJECT: Call to the Audience (Remote Access Option)

Meeting	Meeting Date	Agenda Category	Agenda Item #
Regional Council	January 25, 2024	Information	4

Speakers are limited to a three-minute oral presentation, subject to technological availability, and may submit written comments of any length for the Council's files per the instructions, under the Special Notice on the agenda. Call to the Audience is limited to 30 minutes. Those wishing to address the Council should follow the instructions under the Special Notice to confirm interest in participating in the Call to the Audience and share in advance the topic to be addressed. Individual Council Members may respond to criticism made by those individuals who have addressed the Council and may ask staff to review a matter. However, the Council will not discuss or act on a matter raised during a Call to the Audience that is not already on the agenda.

Communication #3783

SUBJECT: Approval of the December 7, 2023, Meeting Summary and Executive Session Minutes

Meeting	Meeting Date	Agenda Category	Agenda Item #
Regional Council	January 25, 2024	Information	5

In compliance with the Arizona Open Meeting Law (A.R.S. 38-431.01.B.), PAG must provide a recording of the meetings to the public or a written meeting summary. PAG is a private entity and by policy follows the open meeting laws. Meeting recordings serve as the official summary for Pima Association of Governments' Regional Council meetings.

For meeting packets, PAG provides a general description (vs. verbatim) (A.R.S. 38-431.01. B.3.) of the matters considered at the previous meeting including the action items that were approved by the Regional Council at the previous meeting.

Based on past consensus of the Regional Council, the draft meeting summary in the packet is intended to be a general summary and does not serve as the official record of the meeting.

For the January 25, 2024, meeting, Regional Council members are asked to please review the Dec. 7, 2023, meeting summary in this meeting packet and submit written suggestions to staff (jontiveros@PAGregion.com) to request amendments 24 hours prior to the Jan. 25 meeting.

During the January 25, 2024, meeting, the Regional Council may consider suggestions and may amend the draft summary prior to approval.

Regional Council Meeting Summary

Meeting Summary of Thursday, December 7, 2023

Full Video Recording (YouTube): [YouTube Live Video Link](#)

"We encourage and uphold the importance of regional collaboration as the RTA Board addresses regional priorities and pursues regional solutions."

To view the full Regional Collaboration and Unity Pledge, visit: PAGregion.com/pledge

Regional Council Members Present: Mayor Ed Honea
Chairman Peter Yucupicio
Mr. Ted Maxwell
Mayor Tom Murphy
Supervisor Rex Scott
Mayor Paul Diaz
Mayor Joe Winfield
Mayor Regina Romero

Regional Council Members Absent: Chairman Verlon Jose

Staff Lead: Farhad Moghimi, Executive Director
Secretary

The following is an audio-to-text transcription of the **Regional Council Meeting held on Thursday Dec. 7, 2023**, and is being used as the written summary of the discussion.

Minor changes were made to the transcription to include grammar or formatting for clarity, YouTube links/time stamps, spelling corrections and the addition of the agenda number or items based on the posted agenda.

AGENDA

1. **Call to Order (12:03 p.m.)**

[Item 1 Video Link](#)

Chairman Yucupicio: Call to order. Roll call please.

Jacki Ontiveros: Mayor Ed Honea: here; Mayor Tom Murphy: here; General Ted Maxwell: here; Mayor Joe Winfield: here; Supervisor Rex Scott: here; Chairman Peter Yucupicio: here; Mayor Regina Romero: here and Mayor Paul Diaz: here.

Chairman Yucupicio: Thank you. We'll move on to the next item, Pledge of Allegiance.

2. Pledge of Allegiance

[Item 2 Video Link](#)

All: I pledge allegiance to the flag of the United States and to the Republic for which it stands, one nation under God, indivisible, with liberty and justice for all.

Chairman Yucupicio: Call to the audience.

3. Call to the Audience (Remote Access Option)

[Item 3 Video Link](#)

Jamie Brown: Thank you, Mr. Chair. We do have one speaker in the room with us today. I will introduce this item and then introduce the speaker. Speakers are limited to a 3-minute oral presentation and may submit written comments of any length for the Council's files. Call to the audience is limited to 30 minutes. Individual Council members may respond to criticism made by those individuals who have addressed the Council. However, the Council will not discuss or take action on a matter raised during a call to the audience that is not already on the agenda. Our speaker is Bob Cook. Before you begin, Mr. Cook, I'd like to read something, please. Thank you. Please start your comment by stating your name for the record. After that, you will have 3 minutes to address the PAG Regional Council. At the two-minute mark, I will politely

cut in and request that you wrap up your comments. You may now proceed with your comments. Thank you.

Bob Cook: Thank you and good afternoon. Regional Council, I am Robert Cook, four-term member of the Pima County Planning and Zoning Commission, former member of PAG's 2006 Strategic Energy Plan and original two-term past member of RTA's CART Committee. Thank you for this opportunity to address the Regional Council. I am speaking to item 11 of the Council's agenda, carbon reduction strategy. I don't see where you can have confidence in your executive director who has systematically restricted or blocked public comment over many years, especially regarding climate crisis concerns and adapting our transportation system away from fossil fuel consumption, ignored the tenets of good public planning processes, obfuscated revenue and expense reporting and projections, antagonized City of Tucson representatives to PAG/RTA, avoided comprehensive performance evaluation, diverted funds which could have been applied to active transportation and public transit projects, resisted fair representation of the City of Tucson and PAG/RTA decision making, and alienated City of Tucson voters at a time when they will be critical to passing any RTA Next election. It is regrettable that PAG/RTA has abandoned the future oriented vision of RTA founder Republican Tucson Mayor Bob Walkup, who would turn over in his grave knowing how this process has devolved. It is also regrettable that the RTA has not taken better advantage of a military expert on its Board, General Ted Maxwell. The DOD climate adaptation plan from 2014, and updated in 2021, defines the three essential climate planning concepts - adaptation, resilience and mitigation. Adaptation adjustment in natural or human systems in anticipation of response to changing environment in a way that effectively uses beneficial opportunities or reduces negative efforts. Resilience, the ability to anticipate, prepare for, and adapt to changing conditions and withstand, respond to and recover rapidly from this disruption. Mitigation measures to reduce the amount —

Jamie Brown: Excuse me, I apologize for the interruption. You are at 2 minutes, please bring your comments to a close.

Bob Cook: And the final concept is mitigation measures to reduce the amount and speed of future climate change by reducing emissions of heat trapping gases or removing carbon dioxide from our atmosphere. Thank you very much for this opportunity. This is an important message to deliver to you and I hope you take it seriously.

Jamie Brown: Mr. Chair, at this time, we have no more speakers.

Chairman Yucupicio: Move on to item number 4.

4. **All Aboard Arizona Presentation**

[Item 4 Video Link](#)

Farhad Moghimi: Mr. Chair, thank you for this opportunity to have representatives from All Aboard Arizona to present to you regarding the passenger rail project that they've been involved with. Most of you have been involved with this over the years, and we wanted to have an opportunity to give you an update, and I want to thank Mayor Winfield for suggesting and inviting our guests to be here today. Todd, please go ahead.

Todd Liebman: Thank you very much. Good afternoon, members of the Council. I'm Todd Liebman. I'm the president of All Aboard Arizona and I'm also a Council representative to the Rail Passengers Association National Council. And I'm joined today by our board members Jennifer Davis-Paige and Dr. Ken Carrolls. I've got some exciting news for the Council and that is that we have been designated by the FRA, and the Sun Corridor has been designated by the Corridor ID program, and so our corridor is going to be moving forward, which is really exciting, and I know there's been a lot of support by this by the Mayors, Mayor Romero and all the Mayors of the community, and Mayor Winfield. And I think that's just a testament to where we are today. So, thank you very much for that. I'm also pleased to announce that Tucson is going to be the site of the Rail Nation Conference in October 2024. So we're very

excited about that. Basically, the premise of my talk is now is the time for rail. We have a growing population in the region, and it's going to be essential that we address both mobility and contribute to environmental and economic development. This is a once in a lifetime opportunity. Right now, funding is available through the IIJA. Arizona wants passenger rail. There's strong bipartisan support. Amtrak is in support of a daily sunset limited, and we're hoping to hear positive news about that. We've got our fingers crossed - we haven't heard on that grant yet, but we're still hopeful, and the Federal Railroad Administration is doing a long-distance study that's going to enhance transportation to Arizona and the rest of the nation through the Amtrak system. This is a map that shows basically the improvements that would be necessary to get this project moving and complete the project. As you can see, it links Tucson, Phoenix and the Sun Corridor with the rest of the region, and it's a very exciting opportunity. And of course, that moving forward with this study, then we're going to be able to identify costs, timelines and be able to get ready to move this project forward. So it's very exciting. The nice thing is the Sun Corridor goes to all the right places. There's been investments on both ends in public transportation, light rail in Phoenix. The streetcar here. Hopefully, bus rapid transit in the future. And so it's going to link to a lot of transportation opportunities. And it's also going to serve underserved communities, tribal communities along the way and contribute to economic development throughout, and transit-oriented development can contribute to affordable housing and really build new communities and enhance the existing communities. And again, the support is solid for this program. We like to think of the daily sunset limited as low hanging fruit. This is really a tremendous opportunity. People currently ride it. In fact, the Tucson to LA Corridor is one of the most successful, and that's really impressive considering the train runs three days a week currently. If we can get the sunset limited daily, that would be tremendous, and back through Phoenix is going to be really the icing on the cake and that's going to introduce the ability to go from eastern Arizona to western Arizona and the whole region. So, this is really an exciting opportunity as well. And Amtrak has applied for two grants and we're still waiting to hear. We view that there's no investment that can be made that can be better than rail. We can consider congestion mitigation for the busy I-10 corridor. It's economic development and I like to recount a story from the Mayor of Meridian. He says they planted a flag in their

dying downtown at the train station, they rebuilt that train station in Meridian, and he likes to say John Robert Smith was the catalyst for all the positive economic development that's taking place in Meridian since the redevelopment of the train station. So it's really tremendous. It's the greenest form of transportation and, of course, this is the region hard hit by global warming. And so, this is a tremendous opportunity for us to take cars off the road and enhance mobility, and it supports long-term sustainable growth in tax revenue and employment for the region. So that's basically my presentation. I want to thank you so much for having me here today. I'd be glad to answer any questions if you have any, but we're always a resource for you and always feel free to reach out.

Chairman Yucupicio: Thank you. Any comments or any questions.

General Maxwell: Mr. Chairman. Thank you for presenting to us. We've worked with All Aboard before on the rail issues. You're right you've got to move forward on this, the Sun Corridor piece but the map, to make everybody understand the map that you showed us is a lot more grandiose than what your current efforts are as I understand it, for the grants that both ADOT has gone forward with as well as Amtrak has gone forward with as well as [[Inaudible - 10:17](#)] which will stop at just short of the full connection, as I understand. So can you tell us what your organization, what piece of that you are working with and advocating for?

Todd Liebman: Absolutely, sure. So we advocate for passenger rail improvements throughout Arizona. In fact, we were very, well, tried to be instrumental and, hopefully were, in the daily Southwest when Amtrak reduced the frequencies on the Southwest, and we've been advocating for a long time for the daily sunset. So currently the map, that map that we showed, is basically the corridor that Amtrak's talking about with regard to their Connects Us, and so Amtrak has the Connects Us program and so that does represent. The idea is you would have three round trips initially between Tucson, Phoenix and Buckeye. You would have a fourth that would extend to LA, and then you'd have the sunset limited overlaid over that, so you'd have two frequencies daily between Tucson and LA, and then the balance between Phoenix and Tucson. So, I

think that does play into it. We're pretty optimistic about the Welton branch, which is the Phoenix West line. We think there's a lot of synergies regarding freight operation as well and that UPRR may be very favorable to restoring that line of service.

General Maxwell: Well, thanks for clarifying. The important thing I think for everybody to know is, there's the big picture, which is what they're talking about, rail throughout, and then there's what's currently going on through the IIJA which is, I think for our region is what, I won't call low hanging fruit, but I think we're in a good position to be postured to get it using current rail lines predominantly. There are some there, maybe some additions. They will be adding rail stations, and I'm hoping they're going to put one in at Tangerine because it'll make it really easy for me to drive down, park my car and jump on and go to Phoenix. The thing we're going to have the challenge for our region is proving the demand, and that's what the IIJA funding, and correct me if I'm wrong on any of these, essentially helps us get through like the first five years of operations, roughly. At the end of those five years, it's got to either be self-sustaining or those federal funds will drop off. And so those five years are critical to talk about and highlight from a regional perspective the advantages of using it, it's not going to be high speed. You get that question all the time. It's going to be current rail, but if I can work for two hours while I drive to Phoenix and I can make that last mile or two work, I think it's a great alternative. It's got a lot of benefits to it. I appreciate you coming today and look forward to working with you when it comes time to start really advocating for this and for the usage of it, if it comes to fruition, so thank you.

Todd Liebman: Thank you.

Mayor Romero: Yeah. No, I wanted to also thank you for the presentation and really appreciate your commitment to passenger rail. On Tuesday, Dec. 5, Congressman Stanton announced that the Arizona Department of Transportation would receive half a million dollars of Federal Railroad Administration Corridor Identification and Development grants, so that is wonderful news for all of us. And of course, we know that ADOT has provided an additional \$3.5 million in state funds for the planning effort. So it's lifting, you know, it's taking off. It really is truly all aboard right now. I

received a call from Governor Hobbs, just to kind of share in our happiness about this, because it is a good, it really is a good sign from the federal government that they're willing to invest in the planning efforts for Arizona. So, congratulations and thank you for your presentation.

Todd Liebman: Thank you very much. Appreciate it.

Chairman Yucupicio: Anyone else? Go ahead.

Mayor Diaz: Chairman, I have a question regarding if this is going to affect I-11?

Todd Liebman: You know, in my perfect world, the answer would be yes. I mean, not in a negative way, but I mean, this is the kind of project that could reduce congestion overall. So, you know, this is the kind of thing that could potentially take cars off the road and open up more freeway lanes for other purposes, including people that choose to drive. So, it's a win, win situation, really. It doesn't take away from anything but it enhances. So hopefully, you know it would be a net positive and of course moving freight throughout the region. Any improvement to rail is beneficial to moving freight through the region, so to the extent that supports the highway system, you know that we currently have, I think it's positive.

Chairman Yucupicio: Any others? Thank you, Sir.

Todd Liebman: Thank you very much.

Chairman Yucupicio: Item number 5, the approval of Sept. 28 meeting summary.

5. Approval of the Sept. 28, 2023, Meeting Summary and Executive Session Minutes

[Item 5 Video Link](#)

Mayor Weinfield: I move to approve.

Mayor Murphy: Second.

Chairman Yucupicio: All in favor say aye.

All: Aye.

Chairman Yucupicio: Any nays?

Chairman Yucupicio: Ayes have it. Thank you. Item number six.

6. Consent Agenda Items for Information:

- a. **Program Highlights Report**
- b. **Contracts and Agreements Report**

[Item 6 Video Link](#)

Farhad Moghimi: Mr. Chair, as usual, this is just for information only. No action is required but we're happy to answer any questions you may have.

Chairman Yucupicio: Thank you. Move on to item number 7.

7. 2024 Regional Council Meeting Schedule

[Item 7 Video Link](#)

Farhad Moghimi: Mr. Chair, as usual, we try to plan for the following year for the schedule of Regional Council meetings and you have the schedule in front of you. Typically, we meet the fourth Thursday of every other month and obviously December is unique, we try to meet earlier, so you have the schedule in front of you. We had a request from Mayor Romero to potentially meet later in May, instead of the fourth

Thursday in May, potentially meet the following Thursday and if that works for everybody, I recommend making that change, otherwise you have the dates in your packet and hopefully you can set those dates aside.

Chairman Yucupicio: Comments?

Mayor Romero: Mr. Chair, May is usually graduation month, and I don't know about my colleagues, Council colleagues, I mean, Mayor colleagues, but our attendance is requested throughout for middle school graduations, for high school graduations, for University and Pima College graduations, so May is a difficult month and this particular year I have a senior that's graduating, and I believe it's the 23rd for the graduation day. So, either the 16th of May still kind of going into university and Pima College graduations but the following Thursday after that would be also acceptable.

Farhad Moghimi: If you don't mind, because we're going through the TIP process, the following Thursday, the 30th, would work really well with the TIP schedule. If that's OK, I would request a motion for approval of the schedule.

Mayor Weinfield: I move to approve.

Mayor Romero: Second.

Chairman Yucupicio: All in favor say Aye.

All: Aye.

Chairman Yucupicio: Any nays? Ayes have it. Number 8.

8. Contracts for Approval

[Item 8 Video Link](#)

a. Regional Pavement Condition Data and Digital Imagery Collection Contract

Farhad Moghimi: Thank you. Mr. Chair and members of the Council, item 8 is two separate contracts and one of them is for the pavement condition data collection and that's regionwide. You do have the information in your packet. If you have any specific questions, Lance Peterson, who's our project administrator, is available to answer questions as well. We do collect data for pavement condition for all regional facilities, and we collaborate with ADOT to make sure that we have full coverage. All of our members have been engaged in discussions about even potentially having an opportunity to piggyback on this contract for local roads, so that opportunity also exists.

Chairman Yucupicio: Any questions for Mr. Peterson. I'll look for a motion to approve.

Mayor Winfield: I move to approve.

Mayor Murphy: Second.

Chairman Yucupicio: All in favor say Aye.

All: Aye.

Chairman Yucupicio: Any nays? Ayes have it. Item B.

b. PAG Activity-based Model Implementation Contract Amendment

Farhad Moghimi: All right. Mr. Chair, this item is for our activity-based modeling implementation. As you recall, we switched over our modeling effort roughly three years ago, and we have an active contract that we've been

working on. We do see an opportunity to enhance the model so the request is for a change order to that existing contract, that is not to exceed \$300,000 and, as needed, to extend the time period. Dr. Noh is here if you have any questions for him specific to the modeling, I'm going to refer to him to answer those technical questions.

Chairman Yucupicio: Thank you. Any questions?

Mayor Murphy: Move approval.

Mayor Winfield: Second.

Chairman Yucupicio: All in favor say Aye.

All: Aye.

Chairman Yucupicio: Any nays? Ayes have it. Item 9.

Mayor Murphy: Thank you for being here.

Farhad Moghimi: Thank you all.

9. FY 2022-FY 2026 PAG Transportation Improvement Program (TIP) Amendment #2022.080

[Item #9 Video Link](#)

Farhad Moghimi: All right, item 9. Mr. Brown is going to present this item.

Jamie Brown: Thank you, Mr. Moghimi, Mr. Chair, members of the Regional Council. Thank you for the opportunity to introduce this action item, which is an amendment to the PAG FY 2022 through 2026 Transportation Improvement Program or TIP. ADOT has requested a formal TIP amendment to program the full funding of the I-10 Country

Club Rd. and Kino Rd. interchanges project, which has two interchanges combined into one project. These funding adjustments are necessary for the project to proceed to the next stage of implementation. To fully fund this project and remain fiscally constrained, this project also includes programming adjustments to other projects, as shown in the packet. Additionally, the City of Tucson has requested the deprogramming of PAG's Federal Surface Transportation Block Grant STBG funds currently programmed in fiscal year 2024 on the 22nd St., I-10 to Tucson Blvd. project. Since federal apportionments of these STBG funds do not roll forward from one fiscal year to the next, the region risks losing the funds that the project does not get authorized, and the funds cannot be obligated in the fiscal year that they are programmed. Therefore, to avoid the potential loss of these funds to the region, the STBG funding will instead be programmed in FY 24 on ADOT's, I-10 Country Club Rd. and Kino Rd. interchanges project. This is because the funds can be obligated on this project this fiscal year, as part of a funding exchange, an equal amount of state STBG or ASTBG will be programmed on the ADOT Barraza Aviation Pkwy extension project in FY 2026. This ensures that the region's federal funding from the FY 2024 will ultimately be applied to an RTA project per RTA Board policy. In terms of the committee review process, the TIP Subcommittee recommended an earlier version of this TIP amendment at the Oct. 31 meeting. The Management Committee also recommended the TIP amendment at the Nov. 8 meeting. After the Management Committee meeting, the City of Tucson notified PAG of its desire to release the federal STBG funds in FY 2024 on the 22nd St. project as previously mentioned. At its Nov. 15 meeting, the TPC reviewed the updated version of the TIP amendment. With this STBG adjustment and the funding exchange that the TPC unanimously recommended, the updated TIP amendment is included in this Regional Council packet. Mr. Rod Lane ADOT South Central District Engineer is also here today to help address any questions. Thank you, Mr. Chair. Members of the Council. We're happy to take questions.

Chairman Yucupicio: Any questions.

Mayor Winfield: Move to approve.

Mayor Murphy: I'll second that.

Chairman Yucupicio: All in favor say Aye.

All: Aye.

Chairman Yucupicio: Any nays? Ayes have it. Item 10, please.

10. Regional Transportation Revenues Update

[Item 10 Video Link](#)

Farhad Moghimi: All right, Mr. Chair. James Towe is going to give you a quick update on our regional transportation revenues.

James Towe: Thank you, Mr. Moghimi. Good afternoon, Mr. Chair, Members of the Regional Council. Before I begin, I should point out that we have combined the memo and the revenues report while including other fund sources beyond HURF. Keep in mind that this report looks specifically at roadway funding and for the most part, what PAG administers. If we look at Table 3 and Figure 1 through September, there was just shy of \$45 million in HURF and VLT collected across the region. Of that, nearly \$45 million, PAG collected about \$9.2 million, or about 20% of that regional funding. The remainder was distributed directly to Pima County, City of Tucson, South Tucson and the towns of Marana, Oro Valley and Sahuarita. Regional HURF revenues were almost 5.5% higher year-over-year over. The five-year average, we stand at about 9.5%. If we look at Table 4, it shows HURF 12.6 in detail. So far, we have nearly \$7.6 million in the books, which is about 11.4% more than the ADOT official forecast and about 9% stronger than last year. In table 5, it shows us HURF 2.6 with stronger than expected collections totaling almost \$1.7 million through September, which is 13% stronger than last year. And with Table 6 through September, PAG has just over \$77 million in an interest-bearing account. However, most of these dollars are spoken for.

And Table 7, we look at the City and town HURF distributions year-to-date. Table 8 shows the HURF12.6, and 2.6 we've already seen. Additionally, we have Pima County HURF and Pima County vehicle license tax. The portion set aside for transportation use only. And in Table 9, it shows the previous five years and allows us to see how much each city or town received. Table 10 shows U.S. gallons of gas sold in Pima County through various fiscal years. We normally like to see about 13%, and we are currently just under 13% for the current fiscal year. And in Table 11, we see about \$40.5 million collected in TPT this year, trending for a more than 5% gain over the adopted budget that mimics the percent rise over last year's actuals also over 5%. Mr. Chair, that concludes my update. Thank you.

Chairman Yucupicio: Questions? Thank you. Number 11.

11. Carbon Reduction Strategies Update

[Item 11 Video Link](#)

Farhad Moghimi: Yes, Mr. Chair, members of the Council, our air quality guru, Mr. Fitzpatrick, is going to present on this topic, and we'll be happy to answer any questions you have afterwards.

Dustin Fitzpatrick: Good afternoon, Mr. Chair, and members of the Regional Council. I'm Dustin Fitzpatrick, Air Quality Manager, to provide an update on our carbon reduction program.

Farhad Moghimi: Hold the mic a little bit closer, please. Thank you.

Dustin Fitzpatrick: OK. So the bipartisan infrastructure law funded the carbon reduction program, and FHWA announced in April 2022 the requirement for each state to develop a carbon reduction strategy. ADOT consulted with PAG on this requirement in April 2023, and then in October 2023 released a draft reduction strategy and requested comments from MPOs and their member agencies. PAG distributed the draft to our member agencies and submitted comments recommending the addition of eight projected outcomes of programs aligned with our CRP activities

on top of the nine outcomes listed in our adopted OWP that were already captured in the draft. ADOT submitted their final carbon reduction strategy to FHWA last month and will be required to update the document every four years. And FHWA also just recently published the greenhouse gas emissions performance measure rule, which will require states and MPOs to establish four-year declining emissions targets now by Feb. 1 for the state and July 30 of next year for the MPOs. So, PAG's priorities were approved by this Council, including the CRP-eligible activities approved by ADOT and FHWA and are included in the OWP under work element 40 outlining goal numbers 20-30. As mentioned in the prior slide, there are 17 projected outcomes of the programs that are aligned with CRP activities which include nine projects supported by consulting services. In your packet, there's a memo from Nov. 22 detailing those contracts and their benefits for greenhouse gas emissions. So, we currently have active contracts for multimodal performance assessment and vanpool subsidies, the traffic count program, and the activity-based model exploratory planning tool. We are in the request for qualifications and contract negotiation stage for the active transportation plan, household travel study and assessments and micro transit. And selection is pending for orthophotography, data extraction, and the dynamic traffic assignment model. These projects will allow PAG to collect data and establish benchmarks, implement strategies to reduce transportation greenhouse gas emissions, and then track and report on the results. So, the good news is that our efforts to reduce carbon from transportation emissions, which have a global effect, will also help reduce ozone levels locally, which is one of our main air pollutants of concern. So this is because ground-level ozone forms from the combination of nitrogen oxides and volatile organic compounds in the presence of sunlight and around half of the regional nitrogen oxides come from on-road transportation emissions. So, this is a seasonal pollutant with the highest levels occurring during the warmer months of April through October. And this graph here shows the recent 20 years of monitored ozone levels in Pima County in blue, and then above that for Maricopa County in orange. So the region continues to remain in attainment with the EPA standard which was lowered in 2008 and then again in 2015. Maricopa County moved from marginal attainment following the 2015 standard, lowering the 70 ppb and are currently in moderate non-attainment. Every three years, they bump into more

serious designation for non-attainment, and next year in August they'll be moved into a serious designation. So MAG estimates that the ozone on its non-attainment is currently costing their region over \$100 million per year in that moderate designation will climb to over \$260 million per year once they're in serious designation. So, like I said, the greenhouse gas emissions have a double positive effect and in reducing ozone by displacing those nitrogen oxides from vehicle emissions. I'll be happy to take any questions.

Mayor Murphy: Can you give me an example of microtransit? Maybe I should know that answer, but I don't. What is microtransit?

Dustin Fitzpatrick: Microtransit is the smaller vans that pick up folks mostly in the outlying areas versus your fixed-route larger transit.

Mayor Murphy: So, by keeping them more local, we would reduce gases as opposed to having long fixed routes that would have to go far out of the way like down into Green Valley for instance to come back up. Having microtransit down there would, maybe, be a better way to go.

Dustin Fitzpatrick: Yes, and one of the goals of microtransit is bringing more people into the transit system that wouldn't otherwise ride it in outlying areas and enable them to connect into our transit system.

Mayor Murphy: Oh, I see.

Mayor Romero: Chairman, thank you so much. I really appreciate this discussion because it really is nice to know and have the copy of ADOT's carbon reduction strategy in front of us. But yet I believe that their plan reiterates what we've been saying all along, that as an MPO, we have to make the decisions and put together the plan that really reduces carbon in our communities and all of the eligible activities under the federal guidelines are acceptable. I'll say once more, I'm highly, highly disappointed that there was no more thorough conversation about, with this Board and

with the Community about how to reduce carbon in our community and that the Executive Director of the PAG took it upon themselves to make the decisions for consulting. We're spending millions of dollars in consulting, and I've asked here before, and I want to ask again, because I have not received the appropriate information. Why were these activities selected, and how were committees engaged in selecting those activities?

Farhad Moghimi: Mr. Chair, Mayor Romero, I believe one of the slides that Dustin had up outlined some of the process, so coordination with ADOT, and coordination with the FHWA was the first step in the process, understanding the new regulation that came out. After that —

Mayor Romero: Mr. Moghimi, we have all of that information in front of us and you've stated that before. My question is, how are these activities selected? Because these activities were not discussed by this Board, and how were committees engaged that are responsible for making these decisions in giving advice and feedback on the selection of these consulting programs?

Farhad Moghimi: Be happy, too. Mr. Chair, Mayor Romero. Once we identified what the legislation requires, that information was obviously conveyed to the committees. That is Management Committee, TPC, EPAC. They all had an opportunity to review and comment. We formally put out a letter requesting comments. We only received one comment from one of the entities, and we did respond in writing. Following that, Regional Council had two opportunities to review and comment on the activities, Regional Council approved the activities in May as part of the Overall Work Program.

Mayor Romero: Sir, we approved the budget. We did not approve or have any conversations of the activities. This has been a point of contention since May and before I have requested that we, that you bring to the table a conversation about greenhouse gas reduction in the carbon reduction strategies program, and we have never seen that item being included in any PAG agenda. Approving a budget and having a conversation about the details of that budget is not one and the same. So, I

have also been told that the committees have requested this item be discussed at the committees and that there has been no opportunity afforded to them to have a discussion about what the money is going to be invested in. Now mind you, this is \$11.5 million that this region is receiving for carbon, carbon reduction, and microtransit, as much as I love it and I think should happen, it does not really have an impact on reducing carbon emissions, and so I maintain that using this level of funding for planning and not giving this Board and the community an opportunity to voice ideas and concepts on how to reduce carbon is very irresponsible. Especially because these are federal funds that are sent to our region very specifically for the carbon reduction program. Planning and consulting is not going to reduce carbon.

Farhad Moghimi: Mr. Chair, Madam Mayor, as part of the process, after the OWP was approved, they took that information, the State's plan was submitted in November as Dustin mentioned. Again, we put out another request for comments from all of our entities. They also had a comment period and, ultimately, the state agreed with the recommendations that we have, that's included in their plan and it's approved by the FHWA and recently after the plan was submitted, FHWA came back and issued a new rule which requires establishment of targets which we would have roughly eight months from today. To establish targets over the next eight months, we have to have the information that we need to develop and establish those targets. So, it's in line with the requirements from the feds and the state, and other than that, and General Maxwell, you asked this question before and that we can put that slide back up again, comparing where we are. And, potentially if we don't, if we don't do what we need to do, the cost to the region could be over \$100 million a year to address, if we end up in a non-attainment situation. So we have to establish, can you bring that slide back up please, we have to establish those targets and we have to have the measures in place. Otherwise, we're talking about \$100 million plus a year just to come back into attainment so we're in a good position. The question is, how proactively can we work to make sure that we don't end up being where Maricopa County is and remind me again, currently it's \$100 million and it could be \$250 million you said annually?

Dustin Fitzpatrick: The projection starting next year from serious non-attainments is \$260 million.

Farhad Moghimi: \$260 million a year. That would be the impact. If we don't do what we need to.

Mayor Romero: Mr. Moghimi, I understand that we all understand that the explanation has been put out there. My contention is that you have not given the community and this Board the opportunity to help plan with you. ADOT's plan basically says the same thing. Their plan reiterates what we've been saying all along that an MPO, not the Executive Director of the MPO, the Board, the representatives of the region must make our own plan. And that all activities eligible under the federal guidelines are acceptable, and so you have not allowed the discussion between this Board and the discussion between the committees that help us plan. You basically presented us a budget and have decided that this is what you're going to spend the money on and that is one, unfair, and two, it really doesn't allow for the jurisdictions that are appropriated annually these funds the opportunity to be able to participate in this. I know that Pima County is putting together a sustainability and climate action work on their own. The City of Tucson has completed a three-year process of Tucson Resilient together. We've done a lot of research and input from our community. We know exactly how to help reduce carbon emissions and yet, we were not given the opportunity to be able to sit down and give input and help decide how to spend this money. It's \$11.5 million, and so, I would suggest to my colleagues on the Board that we, as a Board, bring this item back and that with the help of the committees that are designated to help give advice to this Board that we get their input and see where exactly it is that we need. If we need consultants, then be it, we'll need consultants and we'll go in that direction. But I think it's premature for us as a Board to approve this item without the input and feedback of the committees that the Citizens Committee and technical experts that should be giving us input on this item. So that, I would request that, we give direction to our Executive Director to go back to our committees and seek input and advise for this Board to make decisions on how to spend this money.

Farhad Moghimi: Mr. Chair, again if I may, Madam Mayor, this was brought to the Regional Council on two different occasions. Regional Council approved that we have entered into agreement with ADOT, so this is really far enough along with ADOT that I would request that you allow us to continue to do what you already authorized us to do. The bulk of the work is ahead of us, and our staff are doing a wonderful job of making sure that we have a process in place. To make sure the region is ready to address this issue.

Mayor Romero: Colleagues, I disagree completely with that recommendation. Do we know how much we're spending on consulting? Is there a number attached to the consulting budget?

Farhad Moghimi: Yes, it was, included in my memo that I —

Mayor Romero: No. Do you know, can you please reiterate the amount?

Farhad Moghimi: This year's budget is roughly about \$2.3 million out of that, obviously, we have our staffing cost, I don't know off top my head, I'll have to look it up, but I'll be happy to follow up with the same memo with the details on that.

Mayor Romero: Colleagues, I would ask that we put the transparency of the investments, especially federal investments that are coming in, I would highly recommend that we ask our committees that, by the way, several have said they were not given an opportunity to give feedback and advice to us, to remand it back to the committee so that we, at least, if the committee says, "Hey, it's perfectly fine, let's go for consulting, let's spend \$3.5 million of the \$11.5 million that we're receiving as a region in consulting" and they say, let's do it. Well, let's do it. But I would suggest, highly suggest for the benefit of transparency and for the benefit of federal funds that we're receiving, that we remand it back to the committee and have them, give them at least the opportunity to give us some input on this.

Mayor Murphy: Mr. Chair, I guess I would respectfully disagree only from the fact that we have heard that the committees were reached out to and able to weigh in on, and it sounds like only one had responded on that. My other concern is that we approved, within the budget, these contracts and for me to come up with a plan as the Mayor mentioned, I think is a good idea, but it's hard for me to do it without a baseline being established and these are, it seems like these are the things that we're going to be looking at. And then when we establish a baseline on where the concerns are, whether it's microtransit or anything else, then I think that it would come back to us to try to determine how to put a plan together, but if I'm doing my home budget and I don't know how much I make or where it's going, I don't know how to put it together, a budget without having that information, so I'd be concerned that as we've seen on some of our other issues, at some point you have to move forward with compliance. You know whether it be the CAC on RTA or anything else at some point, you have to move forward, but you have to have a baseline, which I'm assuming that's what we're looking at these consultants to do to bring back this information to see where our issues are.

General Maxwell: Mr. Chair, I might even go with kind of a little different angle on it all. One is - I would appreciate, Mr. Executive Director, if you could put together, more importantly, just outline where we stand currently on our carbon reduction plan. I assume there, I'm going to assume and that's a dangerous word, I assume there is something that's currently in place. What you're talking about is trying now to comply and work with ADOT on the development of the next, what I'll call the next generation of the reduction plan. So, I would like to know where we sit right now on a carbon reduction plan. I agree, Mayor Murphy, that we've got to have the data and I've seen a lot of data because Phoenix is in a different spot than we are. They are, air quality wise, they have a lot of air challenges. They're making decisions that perhaps if they've gotten on top of it earlier, to Mayor Romero's point, if you get on top of it earlier, we won't face some of those drastic decisions. But I would like to see what we're doing with ADOT, and I've already got that down on notes that I'm going to send out to ADOT folks to get me that information so that I understand what the agreement

is. And if, what I'm hearing from you Executive Director is that with \$3.5 million of the \$11.5 million has been obligated?

Farhad Moghimi: So, the memo I sent you roughly 3 weeks ago, outlines the expenses and again, off the top of my head, I don't remember the numbers, but I would refer back to those numbers in the memo.

General Maxwell: So, the full \$11.5 million has not been obligated?

Farhad Moghimi: Oh no, not at all.

General Maxwell: So there's opportunity and I agree, I'm absolutely not a big supporter of planning to death. I think we do a lot of reports and a lot of planning, and some of the municipalities honestly have the ability to do more planning and more reports, but a lot of municipalities don't, so you know, I would just like to get, conversations happen several times, and I think it would be good for us to get the details that you could provide us on the current plan, what the ADOT, what the agreement with ADOT is looking like and I'm going to check on what ADOT's doing, what they expect from us as well. And then I do think, at some point, this is something that's obviously got some passion at the Board. If it needs to come back so that all of us can discuss where we're heading, what direction, if that's the direction we need to go. I'm not sure if we're in a position to even slow anything down on the ADOT side and then being the ADOT representative, I'm going to tell you I don't think that's a good idea either.

Farhad Moghimi: So again, Mr. Chair if I may, with the ruling that just came out, now we have the clock ticking. We have to establish a target eight months from now, and we need the information to establish that target. So, we'll be coming back multiple times to give you updates on activities leading to a recommendation on the target.

Mayor Romero: Mr. Chairman and colleagues. ADOT has submitted their final plan. It was submitted Nov. 14 of this year. And ADOT is reiterating the same thing that I have

been saying since May or before, that MPOs, which is what we are, must make our own plans and plan activities that will reduce carbon in our region. I don't know what ADOT has to do with this anymore. ADOT has very clearly said that MPOs are responsible for making our own plans, and I get it, I see consulting, we've done consulting, Mr. Moghimi. We just did a three-year consulting, we actually did it in 14 months, a climate action plan. It talks about reducing carbon emissions and greenhouse gases, and we paid \$500,000 for that plan with extensive thousands of people participating in our engagement process. You are talking about spending \$3.5 million valuable dollars that we could put into action. I don't think we should make a decision. This board has the responsibility to ask questions. I don't think we should approve a \$3.5 million expenditure out of \$11 million until we see exactly why we're paying so much money for consulting services, and so I do believe in base setting and I believe in making sure that we know where we are, but I just think it is way too much money, and I know for a fact that our Pima County representative and our City of Tucson representative and the committee that should be giving input for this decision are very upset because they did not have the opportunity to have this discussion at this committee. So, we have been having this conversation, Mr. Moghimi, since May. And not once have you had an item for this particular conversation on its own, and I have not been able to receive the appropriate information and the dates and the input from these committees from you, and I just don't think it is responsible for us to move forward without answers to these questions and the opportunity for the public and the committees that should be making these recommendations to us. Until we see that it is irresponsible for us to move forward.

Farhad Moghimi: Mr. Chair, if I may. So, the item was on the agenda at the last meeting, we discussed it at the last meeting. I provided two memos —

Mayor Romero: Sir. And we went round and round with the same conversation that we're having today, Sir.

Farhad Moghimi: Mayor, I'm just reminding everybody that it was on the agenda at the last meeting, we discussed it. I did follow up with a couple follow-up memos. The

purpose of this item again today is to update you on what has happened between us and ADOT and the new ruling. The new ruling, if you can go back to that slide please. The new ruling is very specific that says that ADOT is going to set targets first and we have to establish targets 180 days after that. One more please, where it has that, I just want to reference at the bottom right there. So, ADOT's working within the next two months or so, they have to have their targets, so they are the lead at this point. Once they have their targets established then we are obligated to work with them to establish our own targets and we have 180 days to do so. That is the time period that I'm going to come back to you multiple times to make sure that we are establishing those targets to meet that requirement.

General Maxwell: Thank you, Executive Director. So what I would ask then, because the conversation just flipped a little. OK, I understand Mayor Romero your frustration, but I think we may have already committed some of this money to do this and I don't think that we're not being asked right now. Now if we want to try to pull it back or there's a motion to pull, we could. That's another discussion but what we're talking about right now is what you're working on, what we've authorized in the budget to go work on is to collect the data to be able to establish the targets.

Farhad Moghimi: Correct.

General Maxwell: The conversation of how we use this money we're getting to then approach those targets will come afterwards. But I too, would be concerned if we're spending a large chunk of our money to establish those targets before we do it. Agreed, you sent out a couple of memos, it was on the thing, but again last month, meeting, it also wasn't a vote, and my understanding of this item is there's also not a vote. So that's where the frustration, I think, is coming on, because we're having the conversations, we're getting the memos then we're having conversations. There's really no decision making going on at the Board since the topic came back up after we approved the budget, so I know we made the decision on that, but what I'm hearing you say is, that's why I asked, I'd like to know what our current carbon reduction plan is because I don't want to spend a lot of money on a plan. If once we find our targets,

I'm hoping our targets will be lower because our air quality is better than it is in Maricopa region then we can make good use of the money to make as much impact as possible and we might not need to spend a ton of money on a consultant creating a new plan to address something that we're not at the point of, and that's not to minimize that we could get there, but we can spend all our money, keep planning for the next target as it moves. And that's what Maricopa is facing now they have a plan to keep it moderate well, guess what, now they're moving to serious and they're moving up those levels and the financial implication at that point becomes huge on what we're required to do. The limitations on businesses and economic prosperity in the region becomes significant for what we can and can't do, in the case of businesses. So, all what I'm asking, my request would be is that we get that information on what the current plan is and how much, you know what the contract is that's going to help establish these target so we understand it. And then I think we may have enough information to really have the conversation Mayor Romero you're looking for.

Mayor Romero: I think you're getting to some place that I feel comfortable with but before we spend \$3.5 million on consultants, I think we have to come back to this table and at least get an explanation, what does each category of goal setting and finding the foundation for our carbon reduction. It's, so I don't want to sign a blank check that says yeah, sure, go ahead, spend \$3.5 million in consultants without at least taking a look at, ok, what is absolutely necessary that we have to spend now so that we can start the goal setting process, and I just don't feel comfortable in using, just saying, \$3.5 million without having an explanation of what each consultant means to the work that we have to do ahead.

Farhad Moghimi: Mr. Chair, Madam Mayor, it, in your packet you have the memo that describes from Dustin which activity is desired to do what, so that information is already in your packet. We'll be happy to follow up with another memo to expand on that again. But it's as I said, already in your packet. Be happy to answer any questions you have about those individual activities.

Mayor Murphy: Mr. Chair, my continual difficulty is until we know, even to put the plan together on these targeted areas, to General Maxwell's point, I don't know where the depth of concern on each one of those areas are. We might be great on microtransit and we can kind of put that to bed, but we might have to put a lot of money in our action plan in some other area, but I don't know where that is until we get some measurement of where we stand today and that's my continued concern.

Supervisor Scott: Mr. Chair, just to follow up, looking at this timeline in February of next year, the State Department of Transportation establishes its target. We then have six months from that date to establish our targets. Following up on some of the points of inquiry that have already been made by Mayor Romero, what would be the role of our committees made up of our jurisdictional professionals, as we are moving towards establishing our targets? What would be their role, and I'm also understanding that when there is a recommendation for those targets that those would have to be approved by the Regional Council.

Farhad Moghimi: Correct, yes. Mr. Chair, Supervisor Scott. It's very much similar to our safety targets that we established that go through multiple committees and then ultimately a recommendation is made for Regional Council to accept those targets. So, Dustin is going to be busy the next eight months working with ADOT and all of our committees to fine tune and bring back a scientific-based recommendation on what targets do we want to establish. And that goes back to what General Maxwell was saying as well. Obviously, we want to establish targets that, I don't want to give you a preview on it, but my recommendation would be to make sure that we establish targets that are attainable, and we can have activities that can match that target. So, there's got to be some kind of a balance going back to what Mayor Murphy was saying, where we're at, what can we do and how can we establish targets that we know are achievable, and then that's what we're going to bring back to the Regional Council, working through individual committees, with the recommendation for that target.

Supervisor Scott: If I could follow up, Mr. Chair. What would be the roles of both the consultant that has been referred to previously and our committees. And if you could remind us, which committees will be involved in this?

Farhad Moghimi: Yes, so we've, early on, we've had this conversation. Our Air Quality Subcommittee is probably the best subcommittee to start with, so they'll be doing more of a working group type of activity and supporting Dustin and his team. Once they come up with some of those recommendations, then most likely EPAC and TPC, Management and Regional Council.

Supervisor Scott: And then what, how does the work of the consultant [[Inaudible - 1:00:29](#)]

Farhad Moghimi: All that data comes together from various sources, so they funnel all their data and all that. Going back to what Mayor Murphy said, we've got to put all this data together to come back with a recommendation, so all that information supports the data.

Supervisor Scott: So, this isn't, this is an ongoing process involving our consultants, involving these various committees. There's obviously a tremendous amount of interest at the Regional Council level. Could we have a standing agenda item where we are getting updates on the work of these committees and the consultant so that we can get a better sense of the process that we're going through, as we're going through it, rather than hearing about it 180 days afterwards in some other fashion.

Farhad Moghimi: Of course, again, this ruling just came out last week, or maybe two weeks ago, so this is a brand new rule.

Mayor Romero: And because this is an important ruling, again, I can't stress enough how much money \$3.5 million is out of \$ 11.5 million. We have to make sure that we're taking action and implementing the \$11.5 million, as much as we can, of the \$11.5 million for actual carbon reduction and so for me, I don't believe that it is a good

idea to give a go ahead for all of this consulting and the money we're spending on consulting without really getting an explanation as to why each of these are necessary. And, it is pretty outrageous to spend so much money on planning and consulting when we have such little money because of the ruling that we have to react and do something about, and you know you have Environmental Quality as part of what Pima County is tasked with and so Pima County has to respond to the federal government in terms of what we're doing to reduce greenhouse gases and protect our ozone so, you know, I just don't feel comfortable that we have given enough explanation or presentation as to why these consulting contracts are necessary.

Supervisor Scott: I share some of your concerns and although this is an information item, we are obviously going to have to make some decisions moving forward and that was why I was asking if we could have a standing agenda item that will keep us continually updated on the work of those committees and how those previously authorized to be expended funds are, are being utilized. So, I'm trying to follow up on some of the concerns that you have expressed.

Mayor Romero: Thank you. I appreciate it.

Chairman Yucupicio: Thank you any other? I actually think we're in a good place. I'm glad everybody's asking the questions you're asking.

Supervisor Scott: I'm sorry, Mr. Chair. Can I just ask a clarification question from you? Do I need to make a formal motion that we have a standing agenda item associated with this or is that just something that —

Farhad Moghimi: Again so, obviously, between the Chair and the Vice Chair, you all make the decision so —

Chairman Yucupicio: So we're going to get there before you got there, but you know exactly the concerns of everybody. I think the simple question was how did you choose or who chose. That's where we started and then we got in all over the place,

but that you needed, but you do need sometimes somebody to put everything in line and get you there. However, I think in part of that standing committee that consultant should come in here and say this is why we chose these categories and I believe that's what you want.

Mayor Romero: That's right.

Chairman Yucupicio: Once we get to that point, then we can grill each other again and go through the whole point because it is what we're looking at, the overall reduction of carbon and everything else and you know ground water, air contaminants, everything you know, we are on the same boat. However, I think we're OK, this was more to get to this point and have that debate, and I think we did a good job of it. It's just that I think in one of those meetings we should bring, that's what I do where I work at. If the rest of the Council doesn't understand, bring him in and tell him, then you tell me where you stand and what you thought of why he's directing these categories he has to have happen and if that's what you were asking for—

Mayor Romero: That is. Absolutely.

Chairman Yucupicio: And I think, Regional Council, that's what we should do. Bring them in one time to give us a good explanation because some of us might not have been here or maybe didn't see the memo and all that stuff, and even what their purpose is of, you know, their contract is, what they're going to work on and I think where we should be at.

Mayor Romero: Thank you.

Chairman Yucupicio: Thank you, Sir. Any other questions? If not, we'll move on to #12 which is Executive Session.

12. Executive Session

[Item 12 Video Link](#)

Chairman Yucupicio: Is there a motion?

1:09 p.m.: Motion was made by Mayor Murphy, seconded by Mayor Romero and unanimously carried that the Regional Council of Pima Association of Governments move into closed Executive Session.

Chairman Yucupicio: The Council will now move into Executive Session.

Chairman Yucupicio: Taking a motion to reconvene.

1:42 p.m.: Motion was made by Mayor Honea, seconded by Mayor Romero and unanimously carried that the Regional Council of Pima Association of Governments move back into regular session.

Chairman Yucupicio: That takes care of item number 12. Move on to item 13, adjournment.

13. Adjournment

The meeting was adjourned at 1:42 p.m.

CERTIFICATION

I hereby certify that the foregoing is a meeting summary of the Pima Association of Governments (PAG) Regional Council meeting held on Dec. 7, 2023. This summary is not intended to be verbatim. It serves as the summary of action items taken at the meeting upon approval by the PAG Regional Council. An audio recording is available upon request and serves as the official minutes. I further certify that a quorum was present.



Farhad Moghimi, Executive Director

In compliance with the Arizona Open Meeting Law, the PAG Regional Council legal actions and this meeting summary are posted online, and an audio recording which serves as the official

minutes of the meeting is available upon request. In addition, a meeting video is also available at: [YouTube Video Link](#).

All Aboard Arizona
Presentation to the
Town of Oro Valley/Pima Association of
Governments

-Todd Liebman

All Aboard Arizona-President

-Jennifer Davis Page

All Aboard Arizona Board
Member

602-412-1637

Todd's cell:

608-333-7726

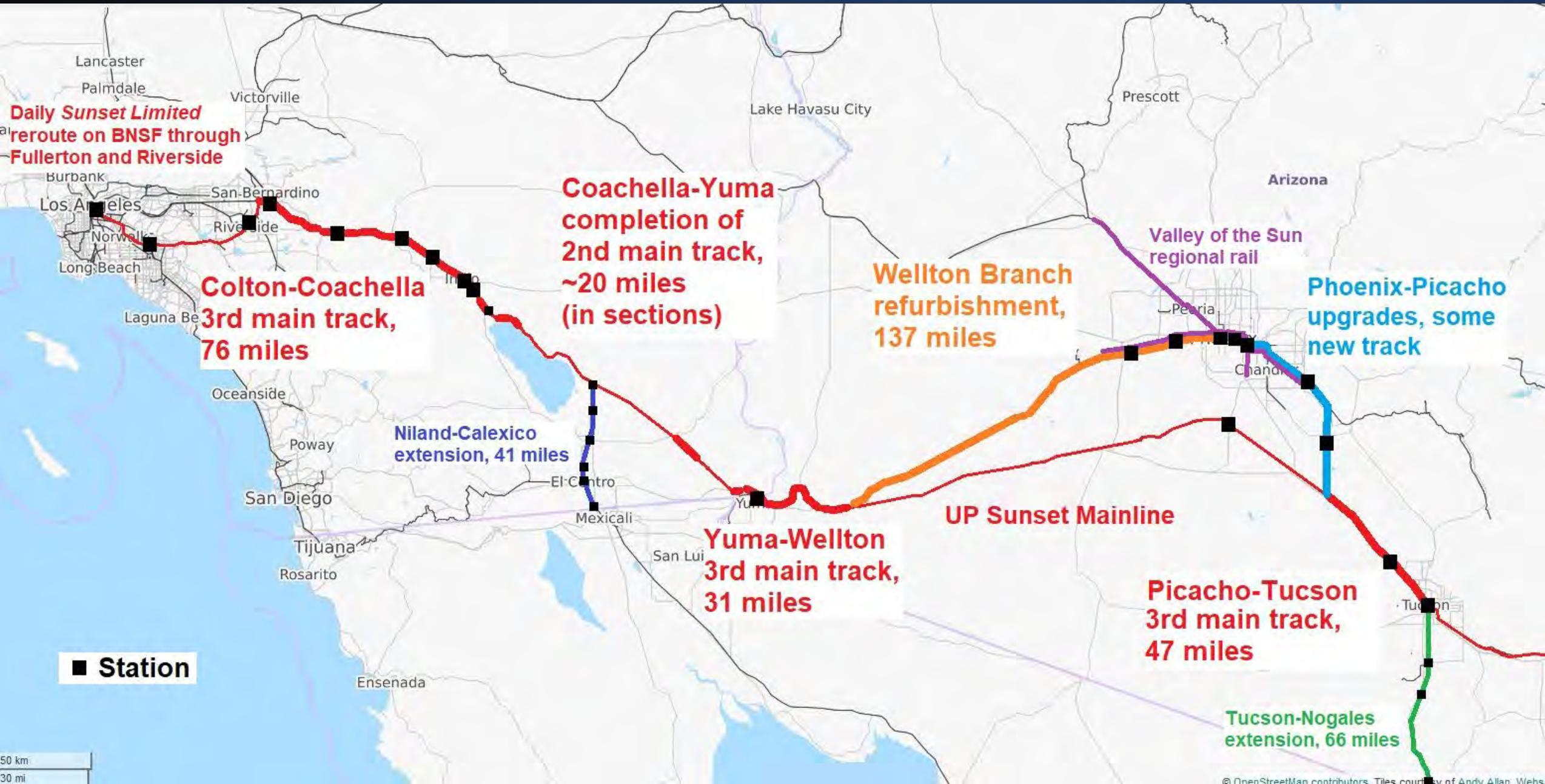
tjliebman@gmail.com



Executive Summary of Key Ideas

- Now is the time for the Sun Corridor; a once in a generation opportunity - Infrastructure Investment and Jobs Act (IIJA)
- Arizona wants passenger rail
- Strong bi-partisan support
- Amtrak supports a daily Sunset Limited routed through Phoenix and has applied for two IIJA grants
- The Federal Railroad Administration's Long Distance Passenger Rail Study
- The State of Arizona has applied for the Federal Railroad Administration's Corridor ID program





Daily Sunset Limited reroute on BNSF through Fullerton and Riverside

Colton-Coachella 3rd main track, 76 miles

Coachella-Yuma completion of 2nd main track, ~20 miles (in sections)

Wellton Branch refurbishment, 137 miles

Valley of the Sun regional rail

Phoenix-Picacho upgrades, some new track

Niland-Calexico extension, 41 miles

Yuma-Wellton 3rd main track, 31 miles

UP Sunset Mainline

Picacho-Tucson 3rd main track, 47 miles

Tucson-Nogales extension, 66 miles

■ Station

50 km
30 mi

Sun Corridor Tucson to Phoenix High Performance Rail

- **EXISTING RIGHTS OF WAY GO TO ALL THE RIGHT PLACES**
- **Easier to develop and less costly than most projects**
- **Phase 1 Environmental already completed**
- **Support is solid throughout the corridor**
- **Arizona has applied for the Corridor ID program**



Daily *Sunset Limited* Through Phoenix

“Low hanging fruit”

- **Strong Existing Ridership**
- **Links to the national rail system east and west**
- **Reintroduces Rail Travel to Phoenix**
- **Amtrak has applied for two grants**



Rail Passenger Service Presents Unmatched Opportunities

- It's congestion mitigation for the I-10 corridor
- It's economic development for cities and towns throughout Arizona
- It's the greenest form of transportation in a region hard hit by global warming
- It supports long term, sustainable, lasting employment and tax revenue





Questions?

Carbon Reduction Program (CRP) Update

Dec. 7, 2023

Regional Council Meeting

Dustin Fitzpatrick, Air Quality Manager



Pima Association of Governments

»» State Carbon Reduction Strategy (CRS)

- April 2023 – ADOT consultation with PAG
- October 2023 - ADOT released Draft CRS
 - Comments requested from MPOs and their member agencies
 - PAG recommended eight additional “projected outcomes of the programs aligned with CRP activities within the OWP,” for a total of 17 outcomes
- November 2023 - ADOT CRS submitted to FHWA
 - State CRS update required every four years
- February 1, 2024 – State DOTs will establish targets by this date; *MPOs are required to establish targets no later than 180 days afterward.*

490.105(e)(1)(ii) and 490.105(f)(1)]

[23 CFR

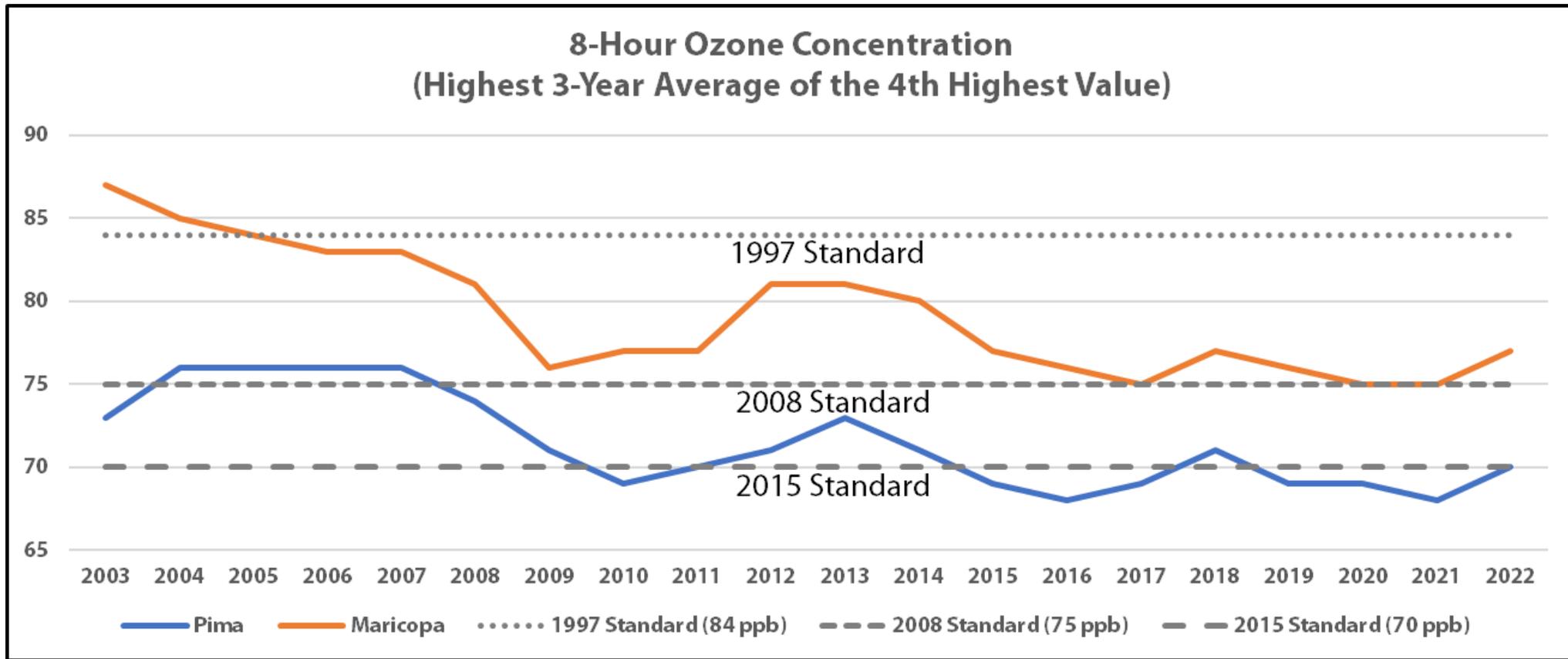


PAG Priorities

- **CRP-eligible activities identified and approved by ADOT/FHWA**
- **Adopted Work Element 40 – Transportation Activities, Goals 20-30**
- **Nine Projects supported by Consulting Services**
 - Active Contracts
 - Multimodal Performance Assessment
 - Vanpool Subsidies
 - Traffic Count Program
 - Request for Qualifications/Contract Negotiations
 - Active Transportation Plan
 - Household Travel Study & Assessment
 - Microtransit
 - Selection Pending
 - Orthophotography Data Extraction
 - Dynamic Traffic Assignment (DTA) Model
 - Activity-Based Model (ABM) Exploratory Planning Tool



»» Carbon Reduction and Ozone



Pima – Attainment

Maricopa – Nonattainment : Marginal (2018) > Moderate (2021) > **Serious** (Aug 2024)



>> Questions?

Dustin Fitzpatrick

DFitzpatrick@pagregion.com



Communication #3784

SUBJECT: Program Highlights Report

Meeting	Meeting Date	Agenda Category	Agenda Item #
Regional Council	January 25, 2024	Consent Information	6a

REQUESTED ACTION/SUGGESTED MOTION

This is an information item.

ASSOCIATED OWP WORK ELEMENT/GOAL

Overall OWP.

SUMMARY

Program highlights are included in the attachment for November and December 2023.

PRIOR BOARD AND/OR COMMITTEE ACTION

Regular updates are provided for information only.

FINANCIAL CONSIDERATIONS

None.

TECHNICAL, POLICY, LEGAL OR OTHER CONSIDERATIONS

None.

ATTACHED ADDITIONAL BACKUP INFORMATION

Listing Attached.

Staff Contact/Phone

Farhad Moghimi, (520) 792-1093, ext. 4420
Sheila Storm, (520) 792-1093, ext. 4451

OWP Monthly Report

November 2023

Mobility | Sustainability | Livability

40 – Transportation Activities

Goal 1: Meet federal mandates for regional transportation planning

- Monitoring planning document conformance between the RMAP listing of projects and the PAG TIP listing of projects and maintaining project numbers.
- TIP project development, including programming and monitoring new project linework of GIS mapping for the TIP database and documents.
- Continued 2022 NPMRDS performance measure update including peak hour excessive delay measure.
- Held a working group meeting to discuss and get feedback on performance measures and projects for the 2055 RMAP to achieve a fiscally constrained plan.
- Continued development of 2055 RMAP performance measure targets
- GIS staff continued development of RMAP map templates for the plan.
- Continued GIS mapping support through development of a draft template map for the next TIP plan document for new project year ranges (FY 2025–2029).
- GIS staff added line and point geometry to the RMAP database taken from input from the member agencies.
- Continued monitoring planning document conformance between the RMAP listing of projects and the PAG TIP listing of projects and maintaining project numbers.

Goal 2: Establish and Implement a Performance Management Program

- Continued GIS coordination of updates to project locations for TIP project development and selection.
- Continued TIP project development, including programming and monitoring new project linework of GIS mapping for the TIP database and documents.
- Continued ongoing maintenance and updates to the Performance Measure Dashboard tool.
- Continued ongoing monitoring of ADOT's performance measures for the FAST Act.
- GIS staff continued updates to project locations for TIP project development and selection.

Goal 3: Title VI and Environmental Justice Planning and Compliance

- Began negotiations with a consultant to develop a Regional Active Transportation Plan.
- PAG departments each contributed to an exercise summarizing each program that completes Title VI engagement, GIS, Modeling, or other assessments. In addition, staff listed efforts that go above the Title VI/EJ requirements such as efforts to test and prepare to comply with J40 regulations that have interim guidance available.

Goal 4: Develop Multimodal Components of the long-range RMAP

- Met with a working group to discuss the 2055 RMAP project list which comprises multimodal components.
- Attended Smart Growth America's webinar "Complete Streets Power Hour."
- Continued GIS mapping support through development of a draft template map for the next RMAP plan update document and delineation of project locations.

Goal 5: Coordinate transportation planning efforts conducted by other agencies with regional studies

- Continued partnerships with PAG regional agencies related to grant awards and support documentation, including project phasing, planning and programming in the TIP.

Goal 7: Enhance community engagement in and understanding of regional long- and short-range transportation plans and processes

- Continued stakeholder outreach for the TIP development process and programming processes.

Goal 9: Meet federally mandated requirements for transportation program administration and development in order to secure funding for the region

- Supported staff activities related to administering the FY 2022–FY 2026 Transportation Improvement Program (TIP), including conducting meetings, preparing amendments, and HURF reimbursements.
- Supported staff activities related to conducting meetings for development of the next TIP and other TIP development tasks.

Goal 10: Work collaboratively with PAG member agencies to develop TIP project lists that deliver projects in the program in a timely manner and that optimize funding available to the region

- Supported implementation steps for the Regional Transportation Alternatives Grants program projects.
- Continued coordination process with PAG regional partners to develop the FY 2025–FY 2029 TIP
- Continued the coordination process with the PAG regional partners to develop the TIP project lists and delivery schedules.

Goal 11: Maintain funding levels to the region

- Continued monitoring transportation revenues on regional, state and federal levels.

Goal 12: Assess and maintain fiscal constraint for transportation plans and programs

- Continued: Monitoring and management of regional plans and programs.

Goal 18: Enhance database analysis tools and map products to better support regional planning efforts

- **Strategy: Develop database applications and map products.**

Goal 20: Reduce auto emissions by providing a commuter assistance/rideshare program and promoting alternative transportation to employers and commuters. Shifting transportation demand to nonpeak hours or other transportation modes, increasing vehicle occupancy rates, or otherwise reducing demand for roads.

- **Strategy: Provide vanpool subsidies to reduce commute costs.**
- Began meeting with a consultant to develop a Microtransit Study. A signed contract is pending.

Goal 22: Develop Multimodal Components of the long-range RMAP, including the construction, planning, and design of on-road and off-road facilities for pedestrians, bicyclists, and other nonmotorized forms of transportation.

- Began meeting with a consultant to begin development of the PAG Regional Active Transportation Plan. A signed contract is pending.

Goal 24: Plan for incident management and emergency response on a regional level for advanced transportation technologies to improve emergency evacuation and response by federal, state, and local authorities

Goal 4: Develop multimodal components of the long-range RMAP

- Attended Smart Growth America's webinar "Complete Streets Power Hour."

Goal 4: Develop multimodal components of the long-range RMAP

- Continued development of printed version of Tucson Metro Bikeways Map.

Goal 20: Reduce auto emissions by providing a commuter assistance/rideshare program and promoting alternative transportation to employers and commuters. Shifting transportation demand to nonpeak hours or other transportation modes, increasing vehicle occupancy rates, or otherwise reducing demand for roads

- **Strategy: Provide vanpool subsidies to reduce commute costs.**
- Processed vanpool subsidy invoice for vanpool program.

Goal 26: Apply developed activity-based model (ABM) to support PAG's planning efforts including RMAP and TIP. Deploy advanced transportation and congestion management technologies such as transportation system performance data collection, analysis, and dissemination systems.

- Continued review of PAG ABM development documentation.
- Continued the ABM exploratory tool development project literature review.

Goal 29: Evaluate the regional multimodal transportation performance through regional multimodal transportation system

- Scheduled UA project kick-off meeting and reviewed the meeting material.
- Continued DTA project procurement process.
- Continued test of DTA model.
- Began review of 2023 traffic counts.
- Continued turning movement count estimation using a new machine learning algorithm.
- Finalized RFQ process for PAG Household Travel Study and Assessment project.
- Completed the contract and SOW documentation update of PAG Household Travel Study and Assessment project.

12 - Regional Air Quality Planning

Goal 1: Fulfill mandated responsibilities for air quality modeling and planning

- Attended EPA Multijurisdictional Organization Air Quality Transportation Emission Modeling MOVES meeting.
- Continued work to automate overall process to estimate emissions using travel model output and MOVES model.

Goal 2: Conduct a regional air quality planning program

- Attended Sustainable Cities Network Federal Infrastructure Workgroup meeting.
- Attended Sustainable Cities Network Electric Vehicle Workgroup - EV Grant Project Workshop.
- Submitted comments to ADOT for the ADOT Carbon Reduction Program Draft Strategy.
- Attended GSA/DOE RFI for Technologies that Support Net-Zero Carbon Buildings webinar.
- Attended USDOE Overview of the Clean Fuels & Products Energy Earthshot: Alternative Sources of Carbon-Based Products webinar.
- Attended USDOE H2IQ: Hydrogen Safety Panel webinar.

44 - Regional Economic Vitality

Goal 2: Enhance the region's ability to compete in a global economy

- Continued: Participation in meetings and activities of the Making Action Possible (MAP) Dashboard.

36 - Regional Partnering Center Support

Goal 1: Provide staff and administrative support for oversight of RPC projects and programs

- Operated the Sabino Canyon Shuttle
 - Sabino Canyon Trips=237
 - Bear Canyon Trips=232
 - Total Passengers in November=9,723
- Participated in Monthly meeting with U.S. Forest Service team and Crawler staff.
- Addressed several repair solutions for high season shuttle operations.

38 - Travel Reduction Program

Goal 1: Meet the goals and objectives and implement all the tasks and activities as described in the TRP Scope of Work for the ADEQ Air Quality Grant.

- Resubmitted NTD Report package via FTA Appian System to address FTA analyst questions about past year variances. Submission completed before Nov. 25 deadline.
- Strategy: Manage web-based Annual TRP Employer Survey platform for major regional employer data collection and reporting.
- Internet-based employee survey on commuter behavior/alternative mode usage and summary reports.
- Collected employee surveys from 18 TRP companies totaling 13,645 employees in November through the online survey tool. Granted four extensions: Raytheon, R&R Products, Jewish Community Center and Community Food Bank representing 13,940 employees. Raytheon represents 13,381 employees.
- **Strategy: Communicate and collaborate with program partners, ADEQ, PDEQ and member jurisdictions, on common goals and initiatives related to supporting regional commuters.**
- Hosted second of two required Regional Task Force Meetings on Nov. 20.
- Distributed nomination materials to TRP organizations in preparation of installation of 2024-2026 Regional Task Force Members.
- Submitted final ADEQ billing and program activity summary for October 2023 expenses.
- Conducted outreach for zero activity TRP employers stressing compliance with local ordinances.
- Updated PAG budget tracking sheet for FY 23-24 ADEQ Grant contract period.

39 - Commuter Services

Goal 1: Reduce auto emissions by providing a commuter assistance/rideshare program and promoting alternative transportation to employers and commuters

- Submitted online enhancement list for execution with PAG Developer of TRP platform.

63 - Regional Modeling

Goal 1: Apply developed ABM to support PAG's planning efforts including RMAP and TIP

- Initiated the review of PAG ABM development documentation.
- Continued review of PAG ABM development documentation.
- Continued ABM exploratory tool development project literature review.
- Geocoded collected FY 2023 building permit data and updated HU inventory including the latest building permit data.

Goal 3: Conduct Transportation Improvement Program (TIP) and the 2055 RMAP modeling and Title VI Analyses, as needed

- Continued review of inputs and outputs for 2055 RMAP modeling.
- Continued collection of information about known projects for 2055 RMAP employment information.

Goal 5: Develop regional employment data

- Concluded 2021/2022 business listing review and processing for employment database.
- Prepared 2022-2055 Employment Forecast for RMAP 2022-2055
- Continued employment data processing optimization.

Goal 6: Evaluate the regional multimodal transportation performance through regional multimodal transportation system

- Scheduled UA project kick-off meeting and reviewed the meeting material.

46 - RTA Support

Goal 1: Provide staff and administrative support for oversight of RTA projects and programs

- Reviewed financial exhibits for new IGAs and IGA amendments.
- Continued contract compliance and monitoring for Total Ride/National Express.
- Conducted two RTA/Total Ride Operations Meetings.
- Continued work with National Express Ltd. on the transfer of Ajo transit services.
- Collaborated with Valley Metro to deliver IGA to continue Western Pima County Sun Shuttle services.
- Monitored Key Performance Indicators (KPIs) with contractor, and updated invoicing protocol.
- Worked with Total Ride/National Express to continue troubleshooting operational issues.
- Provided budgetary approval of RTA invoices from jurisdictions.
- Facilitated a series of meetings with management and operations staff of our contractor to brainstorm and develop an improved operational plan to improve on-time performance for regional fixed-route services.
- Performed an internal audit of Contractor invoicing and data reporting. Errors were identified and communicated to the contractor, and training and reminders of best practices were shared with their new team.
- Attended paratransit service improvement meeting with National Express.
- Wrote and delivered multiple memos to various stakeholders.
- Worked with National Express to onboard the new Operations Manager.
- Provided budgetary approval of RTA invoices from jurisdictions.
- Developed financial exhibits for new IGAs and IGA amendments.
- Maintained off-line RTA cashflow sheet. This sheet tracks fund balances and programming through 2026 of RTA and supplanted HURF (12R).
- Updated project and IGA budget within RTA web.
- Revised the Project Cost Worksheet to include fiscal years 2027 and 2028. This revision is intended primarily for STBG allocations in post-RTA years.
- Attended monthly project updates for Element I roadway projects.
- Provided unexpended budgets from projects to jurisdictions in annual rollover meetings.
- Provided final expenditures and rollover budgets for transit.

- Updated TIP proposed with FY 2023 final expenditures and FY 2024 RTA TPT programming.
- Reviewed financial exhibits for new IGAs and IGA amendments (5310 planning).

Transit planning and data analysis

- Reviewed financial exhibits for new IGAs and IGA amendments. **(5310 planning)**.
- Sun Tran Marketing discussions with Sun Tran marketing team for targeted marketing campaigns for new Sun Shuttle route changes.
- Monthly data reports reviewed and uploaded into the internal database.
- Implemented new quarterly booklet for Sun Shuttle services.
- Attended stakeholder meetings, COA meetings, and advised the CAC on several issues.
- Facilitated Transit Working Group meeting to discuss Transit TIP project lists for fiscal years 2025 through 2029.
- Created SOP for invoice auditing for contracted transit providers.
- Reviewed microtransit pilot bid submissions and offered recommendations.
- Met with consultants selected to conduct PAG's microtransit study to finalize scope of work.
- Collaborated with app developer to troubleshoot and solve database issues related to monthly operating reports.

5310 planning

Goal 4: Develop Multimodal Components of the long-range RMAP.

- **Strategy:** Administer Mobility Management Program in partnership with ADOT under the ADOT MPD 5310 Transit Grant Agreement.
- Collaborated with app developer to troubleshoot and solve database issues related to monthly operating reports.
- Facilitated the Mobility Coordination Working Group meeting on Nov. 16.
- Worked on elements pertinent to the growth and development of the Ambassador Program administered by National Express.
- Began developing an outline of potential funding projects pertinent to FTA Section 5310 funding for Mobility Management during the FY 2024 grant cycle.
- Prepared for the upcoming Mobility Coordination Working Group Meeting tentatively scheduled for Dec. 14, 2023.
- Worked on the development of guidelines for Personal Care Attendants and a potential certification program through PCOA.
- Worked with ADOT/EQS to support agencies in their efforts to meet vehicle inspection compliance requirements and vehicle transfer requests.
- Developed checklists and tools pertinent to taking delivery of awarded vehicles, including preparations, insurance requirements, working with vendors and vehicle inspection process during delivery.
- Worked with AzTA regarding sessions for the upcoming 37th annual AzTA conference in Mesa.
- Ongoing development of efforts to share resources and best practices throughout the region.
- Development of potential approaches to coordinating with case managers across social service agencies and healthcare agencies to address the unique transportation needs of elderly and disabled in both urban and rural areas of the PAG planning area.
- Continued planning for potential Emergency Planning Training in the PAG region.
- Worked with AzTA regarding sessions for the upcoming 37th Annual AzTA conference in Mesa.
- Worked with ADOT/EQS to support agencies in their efforts to meet vehicle inspection compliance requirements and vehicle transfer requests.
- **Strategy: Update Public Transit Human Services Coordinated Transportation Plan under the ADOT MPD 5310 Transit Grant Agreement.**

- Began developing an outline of developmental and research-based tasks and prospective public comment initiatives pertinent to the major update to the PAG Public Transit Human Services Coordinated Transportation Plan in 2024.

Goal 7: Enhance community engagement in and understanding of regional long- and short-range transportation plans and processes

- **Strategy: Identify new stakeholders and coordinate group meetings/presentations throughout the region**
- Conducted updates for the 5310 Coordinated Mobility Working Group list serv.
- Created a draft supplement to the Welcome Packet/ 5310 Fundamentals and Intro Packet with helpful links/resources and content pertinent to the FTA Section 5310 Coordinated Mobility Program.
- Met with non-profits interested in seeking FTA Section 5310 funding and inclusion in the PAG Public Transit Human Services Coordinated Transportation Plan.
- Prepared for the upcoming Mobility Coordination Working Group Meeting tentatively scheduled for Dec. 14, 2023.
- Worked on the development of guidelines for Personal Care Attendants and a potential certification program through PCOA.
- Development of potential approaches to coordinating with case managers across social service agencies and healthcare agencies to address the unique transportation needs of elderly and disabled in both urban and rural areas of the PAG region and incorporate strategies and/or data into the Pima Find a Ride website and potential support for regional disaster preparedness planning.

Goal 19: Provide a resource where travelers can acquire real-time travel information

- Met with non-profits interested in seeking FTA Section 5310 funding and inclusion in the PAG Public Transit Human Services Coordinated Transportation Plan.
- Worked on the summary report of the Mapping Project which included the integration of census block data/TAZ, major cross street integration and search related layers for pulling specific visual data in the maps for trip planning and regional planning/ future updates to the Public Transit Human Services Coordinated Transportation Plan.

47- MainStreet Business Outreach and RTA Project Implementation

Goal 1: Assist businesses impacted by construction of RTA plan projects

- **Strategy: Identify and engage business impacted by transportation project construction before and throughout project implementation.**
- Continued providing ongoing complimentary MainStreet Business Assistance Program outreach and direct consulting services to the 3,192 businesses located on 12 major RTA projects currently in construction or design. (Roadway Construction: #8, #16 (Phase 3&4); Roadway Design: #1 (Phase 2), #5 (Phase 2), #14, #15, #18 (Phase 3&4); #18 (Phase 5&6), #19 (Phase 2), #22, #25, #32 (Phase #5).
- Continued providing project update emails to current outreach area businesses. Currently 11,838 project update emails sent year-to-date (January 2023 through November 2023).

95 - Transportation Art by Youth Program

Goal: Enhance the transportation experience, improve the quality of life within the community, and strengthen community identity, while also providing education and opportunity for local youth to create public art

- Continued program administration, including maintenance and implementation of procedures and policies that facilitate public TABY installations.
- Continued jurisdictional support in the development of approved projects.

OWP Monthly Report

December 2023

Mobility | Sustainability | Livability

40 – Transportation Activities

Goal 1: Meet federal mandates for regional transportation planning

- Monitoring planning document conformance between the RMAP listing of projects and the PAG TIP listing of projects and maintaining project numbers.
- TIP project development, including programming and monitoring new project linework of GIS mapping for the TIP database and documents.
- Continued to coordinate individually with jurisdictions to refine the 2055 RMAP project list in advance of an upcoming working group meeting.
- Continued to draft and develop components of the 2055 RMAP.
- Monitoring planning document conformance between the RMAP listing of projects and the PAG TIP listing of projects and maintaining project numbers.
- TIP project development, including programming and monitoring new project linework of GIS mapping for the TIP database and documents.
- Held a working group meeting to discuss and get feedback on performance measures and projects for the 2055 RMAP to achieve a fiscally constrained plan.
- Continued development of RMAP 2055 performance measure targets.
- GIS staff continued development of RMAP map templates for the plan.
- Continued GIS mapping support through development of a draft template map for the next TIP plan document for new project year ranges (2025 – 2029)
- GIS staff added line and point geometry to the RMAP database taken from input from the member agencies.
- Monitoring planning document conformance between the RMAP listing of projects and the PAG TIP listing of projects and maintaining project numbers.
- Completed calculation of 2022 NPMRDS performance measures including reliability measures, annual hours of peak hour excessive delay per capita, and percent of non-single occupancy vehicle travel measure.
- Attended AZ MPO/COG Planners meeting.

Goal 2: Establish and Implement a Performance Management Program

- GIS coordination of updates to project locations for TIP project development and selection.
- TIP project development, including programming and monitoring new project linework of GIS mapping for the TIP database and documents.
- Continued ongoing maintenance and updates to the Performance Measure Dashboard tool.
- Continued ongoing monitoring of ADOT's performance measures for the FAST Act.
- Discussed new GHG measure development using available tools including MOVES model.

Goal 3: Title VI and Environmental Justice Planning and Compliance

- Began negotiations with a consultant to develop a Regional Active Transportation Plan
- PAG departments each contributed to an exercise summarizing each program that completes Title VI engagement and GIS, Modeling or other assessments. In addition, staff listed efforts that go above the Title VI/EJ requirements such as efforts to test and prepare to comply with J40 regulations that have interim guidance available.
- Prepared 2022 ACS 5-year estimates for Title VI analysis.
- Prepared 2022 ACS 5-year estimates for TIP socio-economic data.

Goal 4: Develop Multimodal Components of the long-range RMAP

- Began planning a second 2055 RMAP Working Group meeting to discuss and further refine the multimodal project components of the plan as part of the project list.
- Met with a working group to discuss the 2055 RMAP project list which comprises of multimodal components.
- Attended Smart Growth America's webinar "Complete Streets Power Hour."
- Continued GIS mapping support through development of a draft template map for the next RMAP plan update document and delineation of project locations.
- Continued development of printed version of Tucson Metro Bikeways Map.

Goal 5: Coordinate transportation planning efforts conducted by other agencies with regional studies

- Partnerships with PAG regional agencies related to grant awards and support documentation, including project phasing, planning and programming in the TIP.

Goal 7: Enhance community engagement in and understanding of regional long- and short-range transportation plans and processes

- Continued Stakeholder outreach for the TIP development process and programming processes.

Goal 9: Meet federally mandated requirements for transportation program administration and development in order to secure funding for the region

- Supported staff activities related to administering the FY 2022–FY 2026 Transportation Improvement Program (TIP), including conducting meetings, preparing amendments, and HURF reimbursements.
- Supported staff activities related to conducting meetings for development of the next TIP and other TIP development tasks.

Goal 10: Work collaboratively with PAG member agencies to develop TIP project lists that deliver projects in the program in a timely manner and that optimize funding available to the region

- Supported implementation steps for the Regional Transportation Alternatives Grants program projects.
- Continued coordination process with PAG regional partners to develop the FY 2025–FY 2029 TIP
- Ongoing coordination process with the PAG regional partners to develop the TIP project lists and delivery schedules.

Goal 11: Maintain funding levels to the region

- Continued monitoring transportation revenues on regional, state and federal levels.

Goal 12: Assess and maintain fiscal constraint for transportation plans and programs

- Continued: Monitoring and management of regional plans and programs.

Goal 18: Enhance database analysis tools and map products to better support regional planning efforts

- Continued reorganizing ArcGIS Online content and evaluated online content belonging to former PAG associates, beginning an effort to decide what objects to transfer and continue to use and what objects to archive.
- **Strategy: Develop database applications and map products.**

Goal 20: Reduce auto emissions by providing a commuter assistance/rideshare program and promoting alternative transportation to employers and commuters. Shifting transportation demand to nonpeak hours or other transportation modes, increasing vehicle occupancy rates, or otherwise reducing demand for roads.

- **Strategy: Provide vanpool subsidies to reduce commute costs.**
- Began meeting with a consultant to develop a Microtransit Study. A signed contract is pending.

Goal 20: Reduce auto emissions by providing a commuter assistance/rideshare program and promoting alternative transportation to employers and commuters. Shifting transportation demand to nonpeak hours or other transportation modes, increasing vehicle occupancy rates, or otherwise reducing demand for roads.

- **Strategy: Provide vanpool subsidies to reduce commute costs.**
- Processed vanpool subsidy invoice for vanpool program.

Goal 22: Develop Multimodal Components of the long-range RMAP, including the construction, planning, and design of on-road and off-road facilities for pedestrians, bicyclists, and other nonmotorized forms of transportation.

- Continued to meet with a consultant to develop the PAG Regional Active Transportation Plan. A signed contract is anticipated for consideration by the Regional Council in January.

Goal 24: Plan for incident management and emergency response on a regional level for advanced transportation technologies to improve emergency evacuation and response by federal, state, and local authorities

Goal 4: Develop multimodal components of the long-range RMAP

- Attended Smart Growth America's webinar "Complete Streets Power Hour."

Goal 4: Develop multimodal components of the long-range RMAP

- **Strategy: Provide vanpool subsidies to reduce commute costs.**
- Processed vanpool subsidy invoice for vanpool program.
- Continue to work with jurisdictional partners to refine the 2055 RMAP project list and associated multimodal components.
- Continued development of printed version of Tucson Metro Bikeways Map.
- Attended FHWA webinar on new greenhouse gas (GHG) performance measure final rule.

Goal 20: Reduce auto emissions by providing a commuter assistance/rideshare program and promoting alternative transportation to employers and commuters. Shifting transportation demand to nonpeak hours or other transportation modes, increasing vehicle occupancy rates, or otherwise reducing demand for roads

- **Strategy: Provide vanpool subsidies to reduce commute costs.**
- Processed vanpool subsidy invoice for vanpool program.
- Continued review of PAG ABM development documentation.
- ABM exploratory tool development procurement procedure and relevant documentation.

Goal 24: Plan for incident management and emergency response on a regional level for advanced transportation technologies to improve emergency evacuation and response by federal, state, and local authorities

- GIS finalized exhibit maps for Transportation Management’s report to ADOT for the supplemental mobility management grant.
- GIS continued investigating additional data layers for possible addition to the dynamic map application for evaluating service area boundaries, the collective reach of FTA Section 5310 funded providers, NEMT and private transportation providers and volunteer driver programs. This effort includes the ability to identify the scope and breadth of transportation services available to elderly and disabled populations in the PAG planning area.

Goal 26: Apply developed activity-based model (ABM) to support PAG’s planning efforts including RMAP and TIP. Deploy advanced transportation and congestion management technologies such as transportation system performance data collection, analysis, and dissemination systems.

- Continued review of PAG ABM development documentation.
- Continued the ABM exploratory tool development project literature review.

Goal 29: Evaluate the regional multimodal transportation performance through regional multimodal transportation system

- Worked to finalize a contact with a consultant for PAG’s Regional Active Transportation Plan for potential Regional Council consideration in January.
- Scheduled UA project kick-off meeting and reviewed the meeting material.
- Facilitated UA project kick-off meeting and discussed the scope of the project.
- Continued DTA project procurement process.
- Continued test of DTA model development.
- Began review of 2023 traffic counts.
- Continued turning movement count estimation using a new machine learning algorithm.
- Finalized RFQ process for PAG Household Travel Study and Assessment project.
- Completed the contract and SOW documentation update of PAG Household Travel Study and Assessment project.
- Worked to finalize a contact with a consultant for PAG’s Regional Active Transportation Plan for potential Regional Council consideration in January.
- Completed review of contractor-collected traffic counts.
- Continued turning movement count estimation using a new machine learning algorithm.
- Updated Scope of Work (SOW) and prepared Request for Quote (RFQ) documents to prepare a solicitation process for PAG Household Travel Study and Assessment project.
- Wrapped up participation in a free Esri massive open online course on GIS for Climate Action, utilizing ArcGIS Pro to help assess and address climate challenges to enable future steps of CRP.
- Continued scope of work for classification of infrastructure for alternate modes of transportation from the 2023 orthophotography to aid a gap and needs assessment in coordination with the Sun Cloud portal tools.
- Continued Scope of Work development for orthophoto feature extraction to support alternate modes of transportation gap/assets/needs assessment to inform the CRP plan.
- Attended the 2023 Urban Heat Island Workshop, presented by the City of Tucson, Tucson Water and CLIMAS to inform developments of scopes of work for CRP.

11 - Regional Integrated Watershed Planning

Goal 1: Fulfill Mandatory Designated Watershed Planning Responsibilities

- Continued to monitor ADEQ's AZPDES permits-in-process map and public notices for advance notice of potential consistency reviews or other PAG 208 processes.
- Continued to provide updates on regional watershed priorities and local water issues for the PAG's Environmental Planning Advisory Committee (EPAC) Top Environmental Issues List for 2024.
- Continued working on annual Administrative Updates to the appendices of the PAG Areawide Water Quality Management Plan (208 Plan).
- Provided annual notice about 208 Plan Administrative Updates to the Environmental Planning Advisory Committee.
- Began data processing for December riparian health assessments for Cienega Creek and Davidson Canyon, within the Cienega Creek Natural Preserve.
- Conducted the December riparian health assessments for Cienega Creek and Davidson Canyon, in coordination with Pima County.
- Shared March and June 2023 Cienega Creek and Davidson Canyon flow lengths with the Pima County Office of Sustainability and Conservation.
- Finalized the PAG Stormwater Program Annual Summary for Fiscal Year 2022-23.
- Attended ADEQ's Surface Water Protection Stakeholder Seminar.
- Received notice from ADEQ about a draft AZPDES permit renewal for the Tucson Electric Power Company North Loop Generating Station in Marana, Arizona and determined that the renewal should not trigger a Consistency Review under PAG's 208 Plan.
- As chair of the statewide Water Quality Management Working Group (WQMWG), convened a meeting of the WQMWG to discuss a bylaws update, 604(b) Competitive Grants Update, and a provided presentation on 208 Planning Background, DPA Roles and Responsibilities with a panel. in coordination with CAG, MAG, and NACOG.
- Convened a meeting of the Stormwater Management Working Group (SWMWG), discussing ADEQ's 10-year study of discharges from large MS4s, the Town of Oro Valley's stormwater asset management system, and the results of the stormwater campaign portion of the Pima County Department of Environmental Quality's annual survey.

12 - Regional Air Quality Planning

Goal 1: Fulfill mandated responsibilities for air quality modeling and planning

- Attended EPA Multijurisdictional Organization Air Quality Transportation Emission Modeling MOVES meeting.
- Continued work to automate overall process to estimate emissions using travel model output and MOVES model.

Goal 2: Conduct a regional air quality planning program.

- Attended Sustainable Cities Network Federal Infrastructure Workgroup meeting.
- Attended Sustainable Cities Network Electric Vehicle Workgroup - EV Grant Project Workshop.
- Submitted comments to ADOT for the ADOT Carbon Reduction Program Draft Strategy.
- Attended GSA/DOE RFI for Technologies that Support Net-Zero Carbon Buildings webinar.
- Attended USDOE Overview of the Clean Fuels & Products Energy Earthshot: Alternative Sources of Carbon-Based Products webinar.
- Attended USDOE H2IQ: Hydrogen Safety Panel webinar.

44 - Regional Economic Vitality

Goal 2: Enhance the region's ability to compete in a global economy

- Continued participation in meetings and activities of the Making Action Possible (MAP) Dashboard.
- Attended the Making Action Possible (MAP) Dashboard meeting for MAP Infrastructure indicator review.

- Planning staff met with EPAC chair and vice chair to review future agenda items and the annual issues list update and PAG staff solicited contributions to the issues list update from EPAC members and its subcommittee's interested parties.

36 - Regional Partnering Center Support

Goal 1: Provide staff and administrative support for oversight of RPC projects and programs

- Operated the Sabino Canyon Shuttle
 - Sabino Canyon Trips = 304
 - Bear Canyon Trips = 289
 - Total Passengers in November = 9,723
- Executed NEXT Contract for 2024 labor agreement.
- Executed consultant agreement for 2024.
- Addressed several repair solutions for high season shuttle operations.

38 - Travel Reduction Program

Goal 1: Meet the goals and objectives and implement all the tasks and activities as described in the TRP Scope of Work for the ADEQ Air Quality Grant.

- Resubmitted NTD Report package via FTA Appian System to address FTA analyst questions concerning agency profile and safety report.

Strategy: Manage web-based Annual TRP Employer Survey platform for major regional employer data collection and reporting.

- Internet-based employee survey on commuter behavior/alternative mode usage and summary reports.
- Collected employee surveys from 14 TRP companies totaling 18,886 employees in December through the online survey tool. Granted two extensions: Atrium Hospitality and Town of Sahuarita. Attempted to reach Community Food Bank to no avail and will issue non-compliance letter in January. Raytheon data is still to be received due to collection of location information issue.

Strategy: Communicate and collaborate with program partners, ADEQ, PDEQ and member jurisdictions, on common goals and initiatives related to supporting regional commuters.

- Confirmed 5 of 10 seats employer representative seats for 2024-2026 Regional Task Force.
- Submitted final ADEQ billing and program activity summary for November 2023 expenses.
- Met with ADEQ Program Manager to discuss program performance and SOW for 2024-2025.
- Conducted outreach for zero activity TRP employers stressing compliance with local ordinances.
- Updated PAG budget tracking sheet for FY 23-24 ADEQ Grant contract period.

39 - Commuter Services

Goal 1: Reduce auto emissions by providing a commuter assistance/rideshare program and promoting alternative transportation to employers and commuters

- Met with TripSpark (RidePro) representative to discuss platform functionality.

61 – Orthophotos

Goal 1: Coordinate data gathering and remote-sensing activities to enhance planning and decision making

- Ortho contractors completed the 2023 flights for the GIS program.

Goal 3: Conduct Transportation Improvement Program (TIP) and the 2055 RMAP modeling and Title VI Analyses, as needed

Goal 5: Develop regional employment data

Goal 6: Evaluate the regional multimodal transportation performance through regional multimodal transportation system

63 - Regional Modeling

Goal 1: Apply developed ABM to support PAG's planning efforts including RMAP and TIP

- Continued test of PAG ABM runs for RMAP 2055.

Goal 3: Conduct Transportation Improvement Program (TIP) and the 2055 RMAP modeling and Title VI Analyses, as needed

- Initiated review of equity and J40 performance measures and developed a quick measure for J40 disadvantaged group roadway usage percentage using select link analysis.
- Continued review of inputs and outputs for 2055 RMAP modeling.
- Continued collection of information about known projects for 2055 RMAP employment information.
- Continued reviewing PADs for HU remaining capacity and commercial employment estimation.
- Completed update of base year special generators for 2029 TIP.
- Completed review of 2023 AOEO population estimates.
- Continue update of 2023 housing unit inventory.
- Initiated trip based TDM run process for 2029 TIP including TAZ data and roadway/transit network update.
- Attended AOEO CTS meeting.
- Facilitated PopTech meeting for RMAP update and review of population estimates.

Goal 5: Develop regional employment data

- Delivered 2021/2022 State Employment Database Update to MAG.
- Continued employment data processing optimization.

Goal 6: Evaluate the regional multimodal transportation performance through regional multimodal transportation system

- Facilitated UA project kick-off meeting and discussed the scope of the project.

46 - RTA Support

Goal 1: Provide staff and administrative support for oversight of RTA projects and programs

- Continued contract compliance and monitoring for Total Ride/National Express.
- Conducted two RTA/Total Ride Operations Meetings.
- Continued work with National Express Ltd. on the transfer of Ajo transit services.
- Monitored Key Performance Indicators (KPIs) with contractor, and updated invoicing protocol.
- Worked with Total Ride/National Express to continue troubleshooting operational issues.
- Provided budgetary approval of RTA invoices from jurisdictions.
- Facilitated a series of meetings with management and operations staff of contractor to brainstorm and develop an improved operational plan to improve on-time performance for regional fixed-route services.
- Performed an internal audit of contractor invoicing and data reporting. Errors were identified and communicated to the contractor.
- Attended paratransit service Ambassadors meeting with National Express staff.

- Provided budgetary approval of RTA invoices from jurisdictions.
- Provided final expenditures and rollover budgets for transit.
- Completed transit planning and data analysis for PAG Executive Director.
- Sun Tran Marketing discussions with Sun Tran marketing team for targeted marketing campaigns for new Sun Shuttle route changes going live in February 2024.
- Monthly data reports reviewed and uploaded into the internal database.
- Facilitated Transit Working Group meeting to discuss Transit TIP project lists for fiscal years 2025 through 2029.
- Reviewed financial exhibits for new IGAs and IGA amendments.
- Continued contract compliance and monitoring for Total Ride/National Express.
- Conducted two RTA/Total Ride Operations Meetings.
- Continued work with National Express Ltd. on the transfer of Ajo transit services.
- Collaborated with Valley Metro to deliver IGA to continue Western Pima County Sun Shuttle services.
- Monitored Key Performance Indicators (KPIs) with contractor, and updated invoicing protocol.
- Worked with Total Ride/National Express to continue troubleshooting operational issues.
- Provided budgetary approval of RTA invoices from jurisdictions.
- Wrote and delivered multiple memos to various stakeholders.
- Worked with National Express to onboard the new Operations Manager.
- Provided budgetary approval of RTA invoices from jurisdictions.
- Developed financial exhibits for new IGAs and IGA amendments.
- Maintained off-line RTA cashflow sheet. This sheet tracks fund balances and programming through 2026 of RTA and supplanted HURF (12R).
- Updated project and IGA budget within RTA web.
- Attended monthly project updates for Element I roadway projects.
- Updated TIP proposed with FY 2023 final expenditures and FY 2024 RTA TPT programming.
- Reviewed financial exhibits for new IGAs and IGA amendments.
- Continued GIS mapping support for RTA including maps for progress to date per project type.

Transit contract management and reporting

Transit planning and data analysis

- Reviewed financial exhibits for new IGAs and IGA amendments.
- Sun Tran Marketing discussions with Sun Tran marketing team for targeted marketing campaigns for new Sun Shuttle route changes.
- Monthly data reports reviewed and uploaded into the internal database.
- Implemented new quarterly booklet for Sun Shuttle services.
- Attended stakeholder meetings, COA meetings, and advised the CAC on several issues.
- Facilitated Transit Working Group meeting to discuss Transit TIP project lists for fiscal years 2025 through 2029.

5310 planning

Goal 4: Develop Multimodal Components of the long-range RMAP.

- **Strategy:** Administer Mobility Management Program in partnership with ADOT under the ADOT MPD 5310 Transit Grant Agreement.
- Facilitated the Mobility Coordination Working Group meeting on Dec. 14. Topics on the agenda included Regional Coordination Goals, Cost Containment Practices, Maintaining Assets in a State of Good Repair and Preparing for the FTA Section 5310 FY2025 Grant Cycle.
- Attended the Ambassador Program meeting with National Express on Dec. 6.

- Worked on elements pertinent to the growth and development of the Ambassador Program administered by National Express.
- Attended the Statewide Mobility Manager's Meeting on Dec. 7.
- Attended the COG/MPO Planner's Meeting on Dec. 8.
- Development potential funding projects pertinent to FTA Section 5310 funding for Mobility Management during the FY 2024 grant cycle.
- Worked on the development of guidelines for Personal Care Attendants and a potential certification program through PCOA.
- Worked with ADOT/EQS to support agencies in their efforts to meet vehicle inspection compliance requirements and vehicle transfer requests.
- Developed checklists and tools pertinent to taking delivery of awarded vehicles, including preparations, insurance requirements, working with vendors and vehicle inspection process during delivery.
- Worked with the Communications Team regarding the development of an FTA Section 5310 Support webpage to assist FTA Section 5310 funded agencies in the PAG region regarding compliance, collection of regional data for coordinated planning efforts and to support asset management and NTD data collection efforts.
- Ongoing development of efforts to share resources and best practices throughout the region.
- Development of potential approaches to coordinating with case managers across social service agencies and healthcare agencies to address the unique transportation needs of elderly and disabled in both urban and rural areas of the PAG region and incorporate strategies and/or data into the Pima Find A Ride website and potential support for regional disaster preparedness planning.
- **Strategy: Update Public Transit Human Services Coordinated Transportation Plan under the ADOT MPD 5310 Transit Grant Agreement.**
- Continued development of the outline pertinent to the developmental and research-based tasks and prospective public comment initiatives pertinent to the major update to the PAG Public Transit Human Services Coordinated Transportation Plan in 2024.

Goal 7: Enhance community engagement in and understanding of regional long- and short-range transportation plans and processes.

- **Strategy: Identify new stakeholders and coordinate group meetings/presentations throughout the region.**
- Met with non-profits interested in seeking FTA Section 5310 funding and inclusion in the PAG Public Transit Human Services Coordinated Transportation Plan.
- Prepared for the upcoming the Mobility Coordination Working Group Meeting tentatively scheduled for Dec. 14, 2023. Topics on the agenda include Regional Coordination Goals – New or Expanded Service, Cost Containment Practices, Maintaining Assets in a State of Good Repair, and Preparing for the FTA Section 5310 FY2025 Grant Cycle.
- Worked on the development of guidelines for Personal Care Attendants and a potential certification program through PCOA.
- Development of potential approaches to coordinating with case managers across social service agencies and healthcare agencies to address the unique transportation needs of elderly and disabled in both urban and rural areas of the PAG region and incorporate strategies and/or data into the Pima Find A Ride website and potential support for regional disaster preparedness planning.
- Worked with ADOT/EQS to support agencies in their efforts to meet vehicle inspection compliance requirements and vehicle transfer requests.
- **Strategy: Update Public Transit Human Services Coordinated Transportation Plan under the ADOT MPD 5310 Transit Grant Agreement.**
- Began developing an outline of developmental and research-based tasks and prospective public comment initiatives pertinent to the major update to the PAG Public Transit Human Services Coordinated Transportation Plan in 2024.

47- MainStreet Business Outreach and RTA Project Implementation

Goal 1: Assist businesses impacted by construction of RTA plan projects

- **Strategy: Identify and engage business impacted by transportation project construction before and throughout project implementation.**
- Continued providing ongoing complimentary MainStreet Business Assistance Program outreach and direct consulting services to the 3,192 businesses located on 12 major RTA projects currently in construction or design. (Roadway Construction: #8, #16 (Phase 3&4); Roadway Design: #1 (Phase 2), #5 (Phase 2), #14, #15, #18 (Phase 3&4); #18 (Phase 5&6), #19 (Phase 2), #22, #25, #32 (Phase #5).
- Continued providing project update emails to current outreach area businesses with 12,097 project update emails sent January through December 202

95 - Transportation Art by Youth Program

Goal: Enhance the transportation experience, improve the quality of life within the community, and strengthen community identity, while also providing education and opportunity for local youth to create public art

- Program administration, including maintenance and implementation of procedures and policies that facilitate public TABY installations.
- Jurisdictional support in the development of approved projects.

Communication #3785

SUBJECT: Contracts and Agreements Report

Meeting	Meeting Date	Agenda Category	Agenda Item #
Regional Council	January 25, 2024	Consent Information	6b

REQUESTED ACTION/SUGGESTED MOTION

This is an information item.

ASSOCIATED OWP WORK ELEMENT/GOAL

Work Element, 1300, Administration

SUMMARY

- The PAG Contracts and Agreements Report for the period Sept. 15 - Oct. 31, 2023, is presented.
- The report contains information on contracts and agreements with a value of up to \$50,000 that were started, extended, or concluded.

PRIOR BOARD AND/OR COMMITTEE ACTION

None.

FINANCIAL CONSIDERATIONS

- 2 new contracts were reported.
- 1 extended contract was reported.
- 5 concluded contracts were reported.

TECHNICAL, POLICY, LEGAL OR OTHER CONSIDERATIONS

None.

ATTACHED ADDITIONAL BACKUP INFORMATION

PAG Contracts and Agreements Report for Sept. 15 - Oct. 31, 2023.

Staff Contact/Phone	Farhad Moghimi, (520) 792-1093, ext. 4420 Roy Cuaron, (520) 792-1093, ext. 4470
----------------------------	--



Pima Association of Governments

Contracts and Agreements Report

11/1/2023 - 12/31/2023

New Contracts

Contract Number	Contractor	PAG Staff	Agency	Start Date	End Date	Amount
24-010-00	Javelina Consulting	Steve Huffman	PAG	12/1/2023	7/31/2024	\$49,000.00
24-011-00	Roadway Asset Services	Lance Peterson	PAG	12/11/2023	12/31/2026	\$450,000.00
Total						\$499,000.00

Extended Contracts

Contract Number	Contractor	PAG Staff	Agency	Start Date	End Date	Amount
17-028-06	Racy Associates	Farhad Moghimi	PAG	12/1/2023	11/30/2024	\$33,000.00
Total						\$33,000.00

Concluded Contracts

Contract Number	Contractor	PAG Staff	Agency	Start Date	End Date	Amount
22-012-00	WEJO Data Services	Hyunsoo Noh	PAG	6/1/2021	12/30/2023	\$59,000.00
20-017-02	Maricopa Association of Governments	David Atler	PAG	2/4/2022	12/31/2023	\$70,000.00
20-018-03	Robert Samuelsen	Farhad Moghimi	PAG	1/1/2023	12/31/2023	
17-028-05	Racy Associates, Inc.	Farhad Moghimi	PAG	12/21/2022	11/30/2023	\$33,000.00
24-008-00	Heinfeld Meech	Roy Cuaron	PAG	7/10/2023	11/30/2023	\$17,495.00
Total						\$179,495.00

Communication #3786

SUBJECT: PAG Regional Active Transportation Plan Contract

Meeting	Meeting Date	Agenda Category	Agenda Item #
Regional Council	January 25, 2024	Action	7

REQUESTED ACTION/SUGGESTED MOTION

The Regional Council will be asked to authorize the executive director to execute a contract between PAG and Kimley-Horn to complete the Regional Active Transportation Plan.

ASSOCIATED OWP WORK ELEMENT/GOAL

Work Element, 40, Transportation Activities

SUMMARY

PAG’s adopted FY 2024 and FY 2025 Overall Work Program (OWP) outlines planning activities to support PAG’s approved carbon reduction strategies and the development of the updated Regional Mobility and Accessibility Plan (RMAP) as required by federal regulations.

These planning activities are detailed under Work Element 40 – Transportation Activities. This includes a Regional Active Transportation Plan (RATP) to be completed during FY 2023-24 and FY 2024-25.

A data-driven RATP is key to enhancing RMAP’s mobility and accessibility options and will also help the region’s efforts in reducing carbon emissions and improving air quality by planning for alternative transportation options such as walking, biking and micro mobility. This effort aligns with other regional and local plans’ recommended actions for reducing transportation emissions. Anticipated carbon reduction benefits will be data-driven utilizing PAG’s activity-based model and will be documented as part of the plan.

Example benefits include, but are not limited to, the number of car trips replaced by an active mode, the amount of carbon reductions expected, anticipated improvement to air quality from an environmental and public health perspective, and best practices available for future planning purposes.

A Request for Qualifications was released in September 2023 to three firms identified in

the CYMPO consultant on-call list developed in coordination with ADOT and the FHWA. Two responses were received to the solicitation in October 2023.

Kimley-Horn was selected from the CYMPO On Call List for Engineering Services based on qualifications from a selection panel comprised of subject matter experts. ARS 41-2578 expressly prohibits a fee-based selection process for these and other designated professional services as outlined in the PAG’s procurement policies.

The RATP contract and Scope of Services, project schedule, and fee schedule is provided with this memo with a fee amount of \$596,992. The anticipated completion date for the RATP is May 2025.

Key elements of the RATP include:

- Extensive public outreach including interactive online engagement methods
- Analysis of existing conditions and needs for active transportation infrastructure
- Corridor identification for active transportation opportunity areas
- An online active transportation toolbox for utilization by member jurisdictions
- Documentation of expected carbon reduction and associated benefits

PRIOR BOARD AND/OR COMMITTEE ACTION

FY 2024 and FY 2025 PAG OWP Approval, May 25, 2023.

FINANCIAL CONSIDERATIONS

Funding in the OWP for FY 2023-24 is \$598,037 and \$100,000 for FY 2024-25. The contract amount is \$596,992 and is not anticipated to exceed the budgeted amount.

TECHNICAL, POLICY, LEGAL OR OTHER CONSIDERATIONS

The RATP is subject to the federal code for the CRP, § 11403; 23 U.S.C. 175.

ATTACHED ADDITIONAL BACKUP INFORMATION

Contract between PAG and Kimley-Horn including the scope of services, project schedule, and fee schedule.

Staff Contact/Phone

Farhad Moghimi, (520) 792-1093, ext. 4420
 David Atler, (520) 495-1093, ext. 4443
 Hannah Oden, (520) 495-1093, ext. 4418

PIMA ASSOCIATION OF GOVERNMENTS
MASTER CONTRACT FOR PROFESSIONAL SERVICES

This Contract is made and entered into by and between Pima Association of Governments (PAG) referred to as PAG in this Contract, and Kimley-Horn referred to as Consultant in this Contract.

WITNESSETH:

WHEREAS PAG has been designated a Metropolitan Planning Organization, pursuant to Title 23, Section 134 of the United States Code; Title 23, Section 450.300 of the Code of Federal Regulations, and Executive Order No. 70-2, dated July 8, 1970, by the Governor of the State of Arizona;

WHEREAS PAG receives state and federal funding pursuant to PAG’s Grant Agreement with the State of Arizona, through the Arizona Department of Transportation [the “ADOT Agreement”];

WHEREAS the ADOT Agreement can be viewed on PAG’s website at www.pagregion.com and all of its applicable terms are incorporated herein by this reference as if fully set forth herein;

WHEREAS PAG desires to engage the Consultant to perform professional services as specified in this Contract;

WHEREAS the Consultant represents that it is fully able and professionally qualified to perform said services; and

WHEREAS the PAG Regional Council has authorized the negotiation and execution of this Contract by the PAG Executive Director.

NOW, THEREFORE, for and in consideration of the mutual covenants and conditions hereinafter contained, PAG does hereby engage the Consultant and the Consultant does hereby accept engagement in accordance with the terms and conditions of the ADOT Agreement and the additional terms and conditions that follow:

A. SCOPE OF WORK

SEE APPENDIX A, incorporated herein by this reference.

B. SPECIAL TERMS AND CONDITIONS

1) Key Personnel:

PAG Project Hannah Oden, Planning Coordinator, with PAG, will serve as the PAG Project Manager and PAG primary contact.

Principal in Charge: Brent Crowther, an officer of the Consultant, will serve as the Principal in Charge and will have the authority to commit resources necessary to complete the Scope of Work and be ultimately responsible for satisfactory execution of all work tasks.

Chris Joannes will additionally serve as the Consultant’s Project Manager and primary contact with the PAG Project Manager, Hannah Oden. The Consultant’s Project Manager’s responsibilities will include coordination and management of day-to-day work, development and production of all deliverables, reviewing and responding to PAG inquiries and comments, and tracking the status of the Contract budget and schedule.

PAG Executive Director: Farhad Moghimi, the Executive Director of PAG, will serve as the PAG Executive Director as defined in this Contract.

- 2) **Compensation:** For the services contemplated in the Agreement, PAG shall pay the Consultant up to the sum of \$596,992.
- 3) **Performance Schedule:** The work shall be completed, and all deliverables shall be submitted to the PAG Project Manager in a timely manner. This Contract term will begin January 26, 2024 unless otherwise amended at the sole option of PAG.
- 4) **Insurance:** The Consultant shall obtain insurance as specified in the ADOT Agreement, section 21.0., and as described below and keep such coverage in force throughout the life of the Contract, and until all of Consultant’s obligations have been discharged. All policies must contain an endorsement providing that written notice be given to PAG and ADOT at least thirty (30) calendar days prior to suspension, termination, material change or cancellation in coverage in any policy. Except for professional liability and workers’ compensation insurance, the liability insurance policy(s) shall include ADOT and PAG as an additional insured parties with respect to liability arising from the Contract. The Consultant agrees that its insurance will be primary, and that any insurance carried by ADOT or PAG will be excess and non-contributing.

<u>Coverage Required</u>	<u>Minimum Limits of Liability</u>
Workers’ Compensation	\$ Statutory
Employees’ Liability	\$ 1,000,000.00
 Professional Liability (Errors and Omissions)	 \$ 1,000,000.00
 General Aggregate Liability	 \$ 2,000,000.00
Products – Completed Operations	\$ 1,000,000.00
Personal and Advertising Injury	\$ 1,000,000.00
Vehicles	\$ 1,000,000.00

The Consultant must present to the PAG Procurement Officer written evidence (Certificates of Insurance) of compliance with these insurance requirements prior to the start of work and shall satisfy PAG regarding their adequacy. All coverage for Consultant's subconsultants shall be subject to the minimum insurance requirements identified above.

The policies shall contain a waiver of subrogation endorsement in favor of the State of Arizona, PAG, and their departments, agencies, boards, commissions, universities and their officers, officials, agents, and employees for losses arising from work performed by or on behalf of the Consultant.

- 5) **Summary Progress Reporting Requirements:** The Consultant shall prepare and submit summary progress reports to the PAG Project Manager on the 1st of each month or as otherwise requested by the PAG Project Manager.

C. GENERAL TERMS AND CONDITIONS

1) Key Terms and Definitions:

- a. **PAG:** Pima Association of Governments, 1 East Broadway Blvd, Ste. 401, Tucson, AZ 85701
 - b. **Contract:** This legal document executed between PAG and the Consultant, which incorporates all applicable provisions of the ADOT Agreement.
 - c. **Disadvantaged Business Enterprises (DBE):** DBEs are for-profit small businesses where socially and economically disadvantaged individuals own at least 51% interest and also control management and daily business operations.
 - d. **May:** Indicates an action that is recommended, but not mandatory
 - e. **PAG Project Manager:** The PAG employee who is responsible for overseeing the Consultant's performance under this Contract.
 - f. **Shall, Must and Will:** Indicate an action that is mandatory.
 - g. **Should:** Indicates an action that is recommended, but not mandatory.
- 2) **Termination:** PAG, upon certification of the PAG Executive Director, without prejudice to any other right or remedy of PAG, and after giving the Consultant ten (10) working days written notice, may terminate the Contract with the Consultant. Such termination will apply to all work, or any part thereof, including, but not limited to, the following reasons:
- a. The Consultant should be adjudged bankrupt.
 - b. The Consultant should persistently or repeatedly refuse or fail to perform in accordance with the requirements of the Contract.
 - c. The Consultant abandons the work, or unnecessarily or unreasonably delays the work.
 - d. Funds are not appropriated or are otherwise unavailable to PAG, including matching funds from any source and grant funds.
 - e. The Consultant should be found by PAG to have a conflict of interest as contemplated by Arizona Revised Statutes § 38-511.
 - f. The Consultant refuses to correct, at the Consultant's sole expense, any portion of the work product determined by the PAG Project Manager to be deficient.

- g. The Consultant fails to comply with any of the applicable terms of the ADOT Agreement.
 - h. PAG determines that termination is in the best interest of PAG.
- 3) **Records:** Internal control over all financial transactions related to the Contract shall be in accordance with the ADOT Agreement and other sound fiscal policies. PAG or ADOT may, at reasonable times and places, audit the books and records of the Consultant, or any and all of a subconsultants' records. Such audit shall be limited to the Contract and the execution of its Scope of Work
- 4) **Arbitration:** It is understood and agreed that no provision of the Contract relating to arbitration or requiring arbitration shall apply or be binding upon PAG except by PAG's express written consent given subsequent to the execution of the Contract. However, at PAG's sole option, or by other means expressly approved by PAG, disputes may be resolved through arbitration. The dispute may be resolved as provided for in Arizona Revised Statutes Section 12-1501 et seq. The Consultant shall continue to render the services required by the Contract without interruption, notwithstanding the provisions of this section, unless otherwise directed by PAG or ADOT.
- 5) **Independent Contractor:** It is clearly understood that each party will act in its individual capacity and not as an agent, employee, partner, joint venture, or associate of the other. An employee or agent of one party shall not be deemed or construed to be the employee or agent of the other party for any purpose whatsoever.
- 6) **Non-Exclusive Contract:** This Contract is awarded with the understanding and agreement that it is for the sole convenience of PAG. PAG reserves the right to obtain like goods and services from another source at PAG's convenience.
- 7) **Patents and Copyrights:** Except as may otherwise be required by the ADOT Agreement or applicable federal law regarding patents [37 CFR 401.14 except for § 401.14(g)], all services, information, computer program elements, reports and other deliverables which may have a potential copyright or patent value, and which are created under the Contract, shall be the property of PAG and shall not be used by the Consultant or any other person except with the prior written permission of PAG.
- 8) **Commencement of Work:** The Consultant shall work only after receiving PAG's Notice to Proceed from the PAG Project Manager. The Consultant shall complete all work to the reasonable satisfaction of PAG in accordance with the Scope of Work.
- 9) **Confidentiality of Records:** The Consultant shall establish and maintain procedures and controls that are acceptable to PAG for the purpose of assuring that no information contained in its records or obtained from PAG or from others in carrying out functions under the Contract shall be used by or disclosed by it, its agents, officers, or employees, except as required to efficiently perform duties under the Contract. Persons requesting such information should be referred to PAG. The Consultant also agrees that any information pertaining to individual

persons shall not be divulged other than to employees or officers of the Consultant as needed for the performance of duties under the Contract, unless otherwise agreed to in writing by PAG or as required by law.

10) Certification: By signature on the Contract, the Consultant certifies that:

- a. The submission of the offer did not involve collusion or anti-competitive practices.
- b. The Consultant has not given, offered to give, nor intends to give at any time hereafter, any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor, or service to a PAG officer or employee or to any public servant in connection with the submitted offer. Signing the Contract with a false statement in connection with this provision shall void the Contract and may result in PAG exercising other remedies under the law and the Contract.
- c. The Consultant hereby certifies that the individual signing the Contract is an authorized agent for the Consultant and has the authority to bind the Consultant to the Contract.
- d. PAG is prohibited from making any award or permitting any award at any tier to any party which has not established and maintained its entity registration on the federal System for Award Management or one that is debarred or suspended or otherwise excluded from or ineligible for participation in federal assistance programs pursuant to 2 CFR 200.213. Neither the Consultant nor any of its subconsultants is debarred, suspended or otherwise ineligible to receive state or federal funds. Contractor will review the Exclusions available at <https://sam.gov/content/entity-information> and assure that it and its subconsultants establish and maintain entity registration on the System for Award Management before entering into any covered contracts.

11) Gratuities: PAG may, by written notice to the Consultant, cancel the Contract if it is found that gratuities, in the form of entertainment, gifts, or otherwise, were offered or given by the Consultant or any agent or representative of the Consultant to any officer or employee of PAG who amended or made any determinations with respect to the performance of the Contract. In the event that the Contract is canceled by PAG pursuant to this provision, PAG shall be entitled, in addition to any other rights and remedies, to recover or withhold from the Consultant the amount of the gratuity.

12) Conflict of Interest: PAG may cancel the Contract for conflicts of interest as though it were a political subdivision pursuant to ARS § 38-511.

No member of the governing body of PAG, and no other officer, employee or agent of PAG or its member jurisdictions who exercise any function or responsibility in connection with planning or carrying out work or services under this Contract, nor any relative thereof, shall have any substantial interest, direct or indirect, in this Contract or subcontract, or to the

proceeds thereof. The Consultant shall take appropriate steps to assure compliance with this provision.

13) Applicable Law: The laws of the State of Arizona and the federal government shall govern this Contract, and suits regarding this Contract shall be brought only in Federal or State courts in the State of Arizona. Venue and jurisdiction for any suit or other dispute resolution proceeding shall be in Pima County, Arizona.

14) Contract Terms and Conditions: The Recitals appearing on the first page of this Contract are incorporated herein as binding Contract terms. PAG reserves the right to clarify any contractual terms or conditions with the concurrence of the Consultant; however, any substantial non-conformity in the Contract, as determined by PAG, shall be deemed non-responsive and the Contract terminated. This Contract, with the incorporated applicable provisions of the ADOT Agreement, contains the entire agreement between PAG and the Consultant relating to the work and services provided hereunder and shall prevail over any and all previous agreements, contracts, proposals, negotiations, purchase orders, or master agreements in any form.

15) Contract Amendments: The Contract shall be modified only by a written Contract amendment signed by PAG's Executive Director and persons duly authorized to enter into contracts on behalf of the Consultant. While amendments are discouraged, they may be considered when PAG adds related work to the original Scope, or when PAG and the Consultant agree that changes to the nature of one or more tasks are sufficient to warrant modification of the Scope. PAG may choose to issue a new RFP for such work, rather than provide a Contract amendment. Amendments may also be required to extend the term of the Contract. Any work performed by the Consultant without an appropriate amendment shall be at the Consultant's sole cost.

16) Assignment – Delegation: No right or interest in the Contract shall be assigned by the Consultant without prior written permission of PAG, and no delegation of any duty of the Consultant shall be made without the prior written permission of the PAG Project Manager. PAG shall not unreasonably withhold approval and shall notify the Consultant of PAG's position within fifteen (15) days of receipt of written notice by the Consultant.

17) Rights and Remedies: No provision in this Contract shall be construed, either expressly or by implication, as a waiver by PAG of any existing or future right and/or remedy available by law in the event of any claim of breach of contract or default. The failure of PAG to insist upon the strict performance of any term or condition of the Contract, or to exercise, or to delay the exercise of, any right or remedy provided in the Contract or by law, shall not be deemed a waiver of the right of PAG to insist upon strict performance of the Contract.

18) Indemnification:

- a. The Consultant shall indemnify, defend and hold PAG harmless from any and all claims, demands, suits, actions, proceedings, loss costs and claims, and damages of every kind and description, including claims for copyright, patent and trademark, and including

any reasonable attorney's fees and/or litigation expenses, which may be brought or made against the Consultant, PAG, any of PAG's officers, directors and employees, or any person, regardless of who makes the claim, to the extent that they result from the negligent or wrongful acts of the Consultant, its employees, agents, representatives, or subconsultants, their employees, agents, or representatives in connection with or incidental to the performance of this Contract. The Consultant's obligation under this section shall not apply to any damages caused by the negligence of PAG or its employees. The indemnification provided in this section shall survive termination of this Contract. The minimum limits and types of insurance provided for in Section B3 shall not limit the scope and extent of indemnity hereunder. The indemnities provided in this Section shall survive termination of this Contract.

- b. In addition, pursuant to the ADOT Contract, Consultant shall indemnify, defend, save and hold harmless the State of Arizona, any jurisdiction or agency issuing any permits for any work arising from this Contract, and their respective directors, officers, officials, agents, and employees (hereinafter referred to as "Indemnitee") from and against any and all claims, actions, liabilities, damages, losses or expenses (including court costs, attorneys' fees, and costs of claim processing, investigation and litigation, hereinafter referred to as "Claims") for bodily or personal injury including, but not limited to, death, or loss or damage to tangible or intangible property including claims for copyright, patent and trademark, caused, or alleged to be caused, in whole or in part, by the negligent or wrongful acts or omissions of Consultant or any of the directors, officers, agents, employees or subconsultants of Consultant. This indemnity includes any claim or amount arising from or recovered under the Workers' Compensation law or arising from the failure of Consultant to conform to any federal, state or local laws, statutes, ordinances, rules, regulations, or court decrees. It is the specific intention of the Parties that the Indemnitee shall, in all instances, except for Claims arising solely from the negligent or willful acts or omissions of the Indemnitee, be indemnified by Consultant from and against any and all claims. It is agreed that Consultant will be responsible for primary loss investigation, defense, and judgment costs where this indemnification is applicable. The indemnities provided in this Section shall survive termination of this Contract.
- 19) Force Majeure:** Except for payment of sums due, neither party shall be liable to the other nor deemed in default under this Contract if and to the extent that such party's performance is prevented by reason of Force Majeure. The term "Force Majeure" means an occurrence that is beyond the control of the party affected and that occurs without its fault or negligence. Force Majeure shall not include late performance by a subconsultant unless the delay arises out of a Force Majeure occurrence.

If either party is delayed at any time in the progress of the work by Force Majeure, the delayed party shall promptly notify the other party in writing of such delay and shall specify the cause(s) of the delay in the notice. The notice shall be hand-delivered or mailed via certified mail with a return receipt, and shall make a specific reference to this section, thereby invoking its provisions. The delayed party shall cause the delay to cease as soon as practicable and shall

notify the other party in writing when it has done so. The time of completion shall be extended by contract modification for a period of time equal to the time that results.

- 20) Right to Assurance:** Whenever PAG has reason to question the Consultant's intent or ability to perform, PAG may demand that the Consultant give written assurance of its intent or ability to perform. In the event that such a demand is made, and no written assurance is given within five (5) business days, PAG may treat this failure as an anticipated breach of contract.
- 21) Advertising:** The Consultant shall not advertise or publish information concerning the Contract without prior written consent of PAG.
- 22) Right to Inspect:** PAG may, at reasonable times and at PAG's expense, inspect the place of business of the Consultant or any subconsultant that is directly or indirectly related to the performance of the Contract as awarded or proposed to be awarded.
- 23) Quality of Materials, Services and Deliverables; Disclaimer Statement:** All materials, services and other deliverables are subject to acceptance by PAG. Materials, services or other deliverables (either interim or final) that fail to conform to the specifications of the Contract or which are deemed to be substantially deficient by the Project Manager shall be returned to the Consultant for remedy. If so returned, all costs to remedy the deficiency or deficiencies shall be the responsibility of the Consultant. Should the Consultant dispute the Project Manager's decision regarding the quality of the work product at issue, the Consultant may appeal the Project Manager's decision, through the PAG Deputy Executive Director, to the PAG Executive Director. The decision of the PAG Executive Director shall be final. In the event the PAG Executive Director should find the work product at issue to be deficient, and the Consultant refuses to correct the work product at the Consultant's sole cost, the PAG Executive Director may invoke the remedies set forth in this Contract for noncompliance.

Any reports and maps completed under this Contract shall contain the following statement:
"This report was funded in part through grant(s) from the Federal Highway Administration and/or Federal Transit Administration, U.S. Department of Transportation via the Arizona Department of Transportation. The contents of this document reflect the views and opinions of the author who is responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the Pima Association of Governments, U.S. Department of Transportation, the Arizona Department of Transportation, or any other State or Federal Agency. This report does not constitute a standard, specification or regulation."

- 24) Exclusive Possession:** All services, information, computer program elements, reports and other deliverables created under this Contract are the sole property of PAG and shall not be used or released by the Consultant or any other person except with prior written permission of PAG.

- 25) **Title and Risk of Loss:** The title and risk of loss of material or service shall not pass to PAG until PAG actually accepts the material or service at the point of delivery, unless otherwise provided within this Contract.
- 26) **Default in One Installment to Constitute Total Breach:** The Consultant shall deliver conforming work or materials in each installment or lot of the Contract and may not substitute non-conforming work or materials. Delivery of non-conforming work or materials, or default of any nature, shall, at the option of PAG, constitute a breach of the Contract as a whole.
- 27) **Liens:** All materials, services and other deliverables supplied to PAG under this Contract shall be free from all liens other than the security interest held by the Consultant until payment in full is made by PAG. Upon request of PAG, the Consultant shall provide a formal release of all liens.
- 28) **Licenses and Compliance with Laws:** The Consultant, and its subconsultant, shall maintain in current status all Federal, State and local licenses and permits required for the performance of the work hereunder and operation of the business conducted by the Consultant as applicable to the Contract, throughout its duration. The Consultant and any subconsultant shall fully comply with all applicable federal, state and local laws and all grant funding requirements contained in the ADOT Agreement in performing hereunder. Without limiting the generality of the forgoing, sections 30.0 and 31.0 of the ADOT Agreement, listing specific state and federal laws and regulations which may be applicable to this Contract, are specifically incorporated herein.
- 29) **Affirmative Action:** The Consultant agrees to abide by the PAG affirmative action policies as they may be amended from time to time.
- 30) **Compliance with Regulations:** The Consultant (hereinafter includes Consultants) will comply with the Acts and Regulations relative to Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, *Federal Highway Administration or the Arizona Department of Transportation*, as they may be amended from time to time, which are herein incorporated by reference and made a part of this Contract, including all applicable provisions of the ADOT Agreement.
- 31) **Non-Discrimination:** The Consultant, with regard to the work performed by it during the Contract, will not discriminate on grounds of race, color, gender or national origin in the selection and retention of subconsultants, including procurements of materials and leases of equipment. The Consultant will not participate directly or indirectly in the discrimination expressly prohibited by the Acts and the Regulations, including employment practices when the Contract covers any activity, project or program set forth in Appendix B of 49 CFR Part 21. Consultant shall comply with all applicable non-discrimination statutes and authorities provided in Title VI, Appendix E.
- 32) **Solicitations for Subcontracts, including Procurement of Materials and Equipment:** In all solicitations, either by competitive bidding or by negotiation made by the Consultant for work

to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subconsultant or supplier will be notified by the Consultant of the Consultant's obligations under this Contract and the Acts and Regulations relative to Non-discrimination on the grounds of race, color, gender or national origin.

33) Participation in ADOT Local Public Agency DBE Data Collection and Reporting System:

Projects using federal funding require that the consultant, as well as any sub-consultants, register as a "vendor" in the ADOT Local Public Agency DBE Data Collection and Reporting System. The Arizona Department of Transportation, in accordance with the provisions of Title VI of the Civil Rights Act of 1964, and the implementing regulations, hereby notifies all consultants that it will affirmatively ensure disadvantaged business enterprises will be afforded full and fair opportunity, and will not be discriminated against on the grounds of race, color, or national origin.

34) DBE Reporting: The federal government and ADOT maintain and mandate participation in a DBE program, which is intended to remedy past and current discrimination against disadvantaged businesses. The DBE program ensures a "level playing field" and fosters equal opportunity in all DOT-assisted contracts.

Federal projects with a DBE goal require that the consultant and DBE sub-consultants use the ADOT reporting system (<https://arizonalpa.dbesystem.com/>) to show the making/receipt of timely payments.

35) DBE Verification: During the life of the contract, PAG and/or ADOT may conduct visits as necessary to verify that the DBE consultants listed on the project are in fact providing the work indicated. Should a DBE sub-consultant identified in the proposal not perform up to standard, the consultant shall contact the ADOT Civil Rights Office or the PAG Contract Officer for possible alternatives before terminating the sub-consultant contract. Possible courses of action include, but are not limited to, replacing of the DBE with another DBE or the reduction of the DBE goal, depending on the progress of the project and the availability of qualified DBE consultants. The consultant shall submit at the completion of the project the "Certification of Payments to DBE Firms" affidavit for each DBE working on the project.

36) Information and Reports: The Consultant will provide all information and reports required by the Acts, Regulations and directives issued pursuant thereto and will permit access to its books, records, accounts and other sources of information, and its facilities, as may be determined by PAG, the *Federal Highway Administration or Arizona Department of Transportation* to be pertinent to ascertaining compliance with such Acts, Regulations, and instructions. Where any information required of a Consultant is in the exclusive possession of another who fails or refuses to furnish the information, the Consultant will so certify to PAG, the *Federal Highway Administration, or Arizona Department of Transportation*, as appropriate, and will set forth what efforts it has made to obtain the information.

37) Sanctions for Noncompliance: In the event of Consultant's non-compliance with the Non-discrimination provisions of this Contract, PAG will impose such Contract sanctions as it or the

Federal Highway Administration or Arizona Department of Transportation may determine to be appropriate, including but not limited to:

- a. Withholding payments to the Consultant under the Contract until the Consultant complies; and/or
- b. Cancelling, terminating, or suspending the Contract in whole or in part.

38) Incorporation of Provisions: The Consultant will include the provisions of Sections 28, 30, 31, 32, 33, 37, 38 and 39 in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, Regulations and directives issued pursuant hereto. The Consultant will take action with request to any subcontract or procurement as PAG, the *Federal Highway Administration or Arizona Department of Transportation* may direct as a means of enforcing such provisions including sanctions for non-compliance. Provided that if the Consultant becomes involved in, or is threatened with litigation by a subconsultant or supplier because of such direction, the Consultant may request PAG to enter into any litigation to protect the interests of PAG. In addition, the Consultant may request the United States to enter into the litigation to protect the interests of the United States.

39) Americans with Disabilities Act: The Consultant shall comply with all applicable provisions of the Americans with Disabilities Act (Public Law 101-336, U.S.C. 12101-12213) and applicable Federal regulations under this Act.

40) Method and Schedule of Payment: The method and schedule of payment is subject to the requirements and restrictions of PAG and the funding agencies.

PAG agrees to reimburse the Consultant up to the sum specified in the proposal, which constitutes full and complete compensation for the Consultant's services.

PAG's normal policy is to process invoices requesting payment for work done within thirty (30) calendar days upon satisfactory delivery of products, services and/or goods, as well as receipt of properly completed invoices and the necessary Project Manager approvals. Written progress reports shall accompany each billing and shall specify the percentage of Contract work completed. Each itemized invoice must bear a written certification by the authorized PAG Project Manager confirming satisfactory progress or completion of services for which payment is requested.

Invoices for payment will be submitted by task and line item as presented with each delivery. Additional documentation may be required from time to time.

Invoices for payment will be submitted by e-mail to:

Roy Cuaron, PAG Finance Director
RCuaron@pagregion.com

Costs incurred by the Consultant as a result of any changes by PAG and/or the Consultant outside of the Scope of Work of this Contract will not be allowed for reimbursement under this

Contract unless such changes and related costs were approved by PAG in writing prior to the Consultant's incurring such costs.

Payment to the Consultant in advance of the Consultant incurring costs for authorized work to be performed under the Scope of Work of this Contract is prohibited unless PAG makes a written determination prior to the payment that an advance payment is in PAG's best interest.

- 41) Equipment Maintenance:** The Consultant must maintain all equipment, as applicable, in good working order throughout the length of the project and must repair or replace any unsafe or inoperable equipment without delay.
- 42) Safety:** The safety requirements of the Occupational Safety and Health Act (29 U.S.C. Sections 651-678) as promulgated by the Federal government, and as implemented by the State of Arizona, apply to all work performed under the proposed Contract. The Consultant will be solely responsible for implementing and enforcing the safety requirements of this Act at all times.
- 43) Retention of Records:** The Consultant shall retain all work materials and records related to the performance of the Scope of Work of the Contract for a period of not less than five (5) years after the final payment is made under the Contract.
- 44) Right to Financial Audit:** PAG retains the right to audit at reasonable times and places the financial books and records of the Consultant relating to the performance of the Contract for a period of not less than five (5) years after the final payment is made under the Contract.
- 45) Assignment of Principals:** The Consultant shall maintain the assignment of its Principals as shown in B1. Prior written permission shall be obtained from the PAG Project Manager for any change in these assignments. PAG will notify Consultant if PAG changes its Project Manager.
- 46) Lobbying:** If this Contract exceeds \$100,000.00, the Consultant shall complete the Certification for Federal-Aid Contracts (ECS Form 90-1, attached hereto) and, when appropriate, the Disclosure of Lobbying Activities (ECS Form 90-3, attached hereto).
- 47) Compliance with Immigration Laws:** As mandated by Arizona Revised Statutes (ARS) section 41-4401, PAG is prohibited from awarding a contract to any consultant or subconsultant that fails to comply with ARS § 23-214(A). PAG must also ensure that every consultant and consultant complies with federal immigration laws and regulations that relate to their employees and ARS § 23-214. Therefore, in signing or performing this Agreement for PAG, the Consultant fully understands that:
 - a. It warrants that both it and any subconsultants it may use will comply with all federal immigration laws and regulations that relate to their employees and their compliance with ARS § 23-214(A);

- b. A breach of the warranty described in subsection A of ARS § 23-214 shall be deemed a material breach of the Contract that is subject to penalties up to and including termination of the Contract; and
- c. PAG or its designee retains the legal right to inspect the papers of any Consultant or subconsultant employee who works on the Contract to ensure that the Contractor or subcontractor is complying with the warranty under subsection A of ARS § 23-214.

48) No Boycott of Israel: Pursuant to ARS section 35-393.01, PAG may not enter into a contract with a contractor, unless the contractor certifies that the contractor is not currently engaged in, and agrees not to engage in, a boycott of goods or services from Israel. Contractor's signature below serves as this certification.

AUTHORIZATION FOR THIS CONTRACT:

The PAG Regional Council duly authorized execution of this Contract on [],

IN WITNESS WHEREOF, the parties hereto have executed this Contract as of the date signed by the PAG Executive Director.

Pima Association of Governments

Farhad Moghimi
As PAG Executive Director and Not Personally

Date: _____

CONSULTANT

Kimley-Horn and Associates, Inc.
Brent Crowther



Date: December 22, 2023

Appendix A: Scope of Services, Project Schedule, and Fee Schedule

Pima Association of Governments (PAG) Regional Active Transportation Plan (RATP)

Updated: December 20, 2023

Scope of Services

TASK 1. PROJECT INITIATION AND MANAGEMENT

Task 1.1. Kick-Off Meeting

CONSULTANT will hold a virtual kick-off meeting with PAG staff to discuss the project scope of work, schedule, data collection, public engagement elements, critical stakeholders, and project branding.

Task 1.2. Project Management Plan

CONSULTANT will develop a draft Project Management Plan (PMP). The PMP will include:

- Key project staff, roles and responsibilities, staff resource plan, and contact information
- Quality assurance/quality control (QA/QC) procedures for all deliverables
- Final scope of work
- Detailed milestone schedule
- Branding suite that will include a plan logo with variations for different types of publications, a comprehensive color palette to be used on all internal and public-facing deliverables, primary and secondary fonts, as well as graphic elements and icons
- Stakeholder Outreach Plan (SOP) that will include contact information for relevant stakeholders, timeframes for stakeholder outreach efforts, and engagement methods.
- Public Outreach Plan (POP) that will include virtual and in-person engagement methods, timelines, staffing, and advertisement methods. The POP will identify disadvantaged and underserved communities as well as those with mobility impairments or restrictions along with methods and strategies for engaging those identified communities. The POP will also provide detail on the use of virtual engagement tools, including the GIS-based application with comment features used in the second and third rounds of public and stakeholder engagement.

CONSULTANT will submit draft PMP to PAG staff for review.

CONSULTANT will finalize PMP based on comments and direction from the PAG project manager (PM).

Task 1.3. Invoicing and Ongoing Coordination

CONSULTANT will submit monthly invoices to PAG with a brief progress report that summarizes work completed during the month and work expected to be completed during the upcoming month. Invoices will provide a task breakdown with hours expended by individual.

CONSULTANT will hold bi-weekly virtual check-in meetings to facilitate continuous communication between the CONSULTANT and PAG staff.

Task 1.4. Technical Working Group

CONSULTANT will collaborate with PAG to identify and invite members to participate in the Technical Working Group (TWG) which will be engaged throughout the planning process to provide input and advice at key project junctures.

CONSULTANT will plan and conduct up to four hybrid in-person/virtual TWG meetings:

1. Concurrent with Task 2 to introduce the project, provide input on the RATP vision, goals, and objectives, and coordinate data requests for Task 3
2. Concurrent with Task 4 to review and comment on initial analysis results
3. Concurrent with Task 6 to comment on the draft Active Transportation Toolbox and carbon reduction benefits analysis
4. Concurrent with Task 7 to review the draft RATP document and to prepare for final round of public engagement

Task 1.5. Project Website

CONSULTANT will collaborate with PAG to develop content for a public-facing project website which will be updated throughout the planning process and serve as a repository for project deliverables and a launch point for virtual public engagement opportunities. The website will be hosted by PAG and will contain links to external virtual engagement resources, as applicable.

Task 1 Deliverables

- Kickoff meeting preparation, facilitation, and summary notes
- Draft and final PMP document
- Monthly invoices and progress reports
- Virtual monthly check-in call preparation, facilitation, and summary notes (if desired)
- TWG meeting coordination, materials, facilitation, and summary notes
- Project website content

TASK 2. VISION, GOALS, AND OBJECTIVES

Task 2.1. Preliminary Vision Statement, Goals, and Performance Metrics

CONSULTANT will review the following materials to inform RATP goals and objectives:

- Active transportation safety summaries (pedalcycle and pedestrian crashes with motor vehicles) from PAG Safety Explorer, or the Arizona Department of Transportation (ADOT) Arizona Crash Information System (ACIS), and other ADOT safety planning efforts including the recent Vulnerable Road User Safety Assessment (VRUSA) as well as the ongoing State Highway Safety Plan (SHSP) and Active Transportation Safety Action Plan (ATSAP).
- Local jurisdiction active transportation and mobility plans
- Local municipality general/comprehensive plans

- National and state resources for health data related to rates and distribution of chronic disease

CONSULTANT will prepare an initial ATP vision statement, preliminary goals that will further the goals of the Regional Mobility and Accessibility Plan (RMAP) and include the Five Es (engineering, education, encouragement, enforcement, and evaluation) of active transportation planning.

CONSULTANT will prepare draft performance metrics that quantify each goal.

Task 2.2. Develop Illustrative Renderings

CONSULTANT will collaborate with PAG to identify facility types and surrounding contexts for which up to eight illustrative renderings will be prepared.

CONSULTANT will develop up to eight illustrative renderings of potential active transportation investments to demonstrate how different treatments could be applied in various urban and rural contexts in the PAG region.

CONSULTANT will submit illustrative renderings to PAG staff for review and comment.

CONSULTANT will update illustrative renderings based on one consolidated set of PAG comments.

Task 2.3. Public and Stakeholder Engagement Round 1 – Visioning

CONSULTANT will prepare for and conduct the first round of public and stakeholder engagement, which will include a combination of in-person and virtual engagement strategies, with three emphases:

1. Refine the preliminary vision statement, goals, and performance metrics
2. Prioritize the goals to inform the recommendation prioritization process in Task 4
3. Inform the community and stakeholders about types of active transportation treatments available, using the illustrative renderings as a tool, and getting feedback on desired treatments.

CONSULTANT will create content to introduce the project to the public and develop a virtual survey to gather feedback on the preliminary vision statement, goals, and performance metrics as well as a visual preference survey using the illustrative renderings to identify locally preferred active transportation treatments.

CONSULTANT will collaborate with PAG staff to identify up to four pop-up locations/piggyback events or two public open houses. These in-person activities provide opportunities for the public to provide feedback on the preliminary vision statement, goals, and performance metrics as well as a visual preference survey using the illustrative renderings to identify locally preferred active transportation treatments. Materials will also be available to direct the public to the virtual survey if they would prefer to comment at a later time.

Task 2.4. Working Paper 1 - Vision, Goals, and Objectives

CONSULTANT will document the process and results of Task 2 activities in Working Paper 1, which will be submitted to PAG staff for review.

CONSULTANT will finalize Working Paper 1 based on PAG comments.

Task 2.5. PAG Committee Updates – Round 1

CONSULTANT will provide virtual or in-person presentations to the PAG Transportation Planning Committee (TPC), Management Committee, and Regional Council as directed by PAG staff. The purpose of the update is to introduce the project to the committees and present key takeaways from Working Paper 1, including the vision, goals, and objectives; illustrative renderings; and public engagement results.

Task 2 Deliverables

- Draft vision, goals, and objectives
- Draft and final illustrative renderings
- Virtual and in-person public engagement materials and advertisements
- Draft and final *Working Paper 1: Vision, Goals, and Objectives*
- PAG committee update preparation, presentation, and summary notes

TASK 3. REGIONAL CONNECTIVITY

Task 3.1. Data Collection

CONSULTANT will collaborate with PAG and member agency staff to collect necessary spatial data, including PAG's orthophoto data and bicycle/pedestrian count data.

CONSULTANT will review and clean the data received from various sources to develop a consistent, region-wide dataset for the existing conditions analysis.

Task 3.2. Previous Plans and Policy Review

CONSULTANT will collaborate with PAG and member agency staff to identify and collect pertinent recent plans, regional and local policies, and programmed active transportation projects at the local, regional, and state level. Recommendations from recent plans will be presented as an evaluation matrix organized by topic area. This streamlined format will be easily digestible and referenced in subsequent steps of the planning process to ensure ATP process and recommendations remain consistent with goals and expectations set in previous planning efforts.

CONSULTANT will identify up to three peer regions and conduct a review of best practices for multimodal policies and implementation of active transportation at the local, regional, and state level to identify gaps in local and regional policies and procedures in the PAG region.

Task 3.3. Existing and Future Conditions Analysis

Using the data collected in Task 3.1 and other publicly available sources, CONSULTANT will conduct an existing conditions analysis with the primary goal of identifying active transportation gaps as well as mismatches between infrastructure and equity-based need.

CONSULTANT will leverage RMAP demographic projections and planned transportation investments to determine where gaps and mismatches may emerge in the future.

Task 3.4. Working Paper 2 – Regional Connectivity

CONSULTANT will document the process and results of Task 3 activities in draft Working Paper 2, which will be submitted to PAG staff for review.

CONSULTANT will finalize Working Paper 2 based on PAG staff comments.

Task 3 Deliverables

- Region-wide existing conditions datasets
- Previous plans and policy review matrix
- Peer region best practices review and gap analysis
- Draft and final *Working Paper 2: Regional Connectivity*

TASK 4. REGIONAL CORRIDOR IDENTIFICATION AND EVALUATION

Task 4.1. Level of Traffic Stress Analysis

CONSULTANT will complete a bicycle and pedestrian level of traffic stress (LTS) analysis of the regional collector and arterial network, ranking streets from low stress (LTS 1, suitable for children) to high stress (LTS 4, suitable only to “strong and fearless” bicyclists and pedestrians). This network will be based on the preliminary LTS analysis derived from OpenStreetMap data and will identify large facilities with high-speed traffic that could pose a soft barrier to bicycle or pedestrian activity.

CONSULTANT will refine preliminary networks based on data collected from Task 3 (i.e., presence of existing bicycle facilities and shared use paths) and based on consultation with PAG staff. The data required for this analysis can be intensive (sidewalk inventories, on-street parking locations), but where unavailable, CONSULTANT will derive suitable proxies where appropriate.

Task 4.2. Equity and Public Health Analysis

CONSULTANT will conduct an equity analysis using a data-driven approach that identifies concentrations of historically disadvantaged or vulnerable populations using public health (CDC Places) and demographic indicators (Census/Justice 40). Special attention will be paid to demographic groups who are likely to face mobility restrictions including populations that are low income, lack vehicle access, face high pollution burdens and health disparities, and are ethnic minorities. This analysis will be used to identify equity priority areas to consider in further phases of analysis.

Task 4.3. Regional Travel Pattern Analysis

CONSULTANT will use the PAG activity-based model (ABM) or Replica Places origin-destination (OD) matrices, PAG's Household Travel Study and Assessment, and mode estimates to conduct a detailed network analysis for scenario planning utilizing the following:

- **Active Trip Potential.** An evaluation of existing travel patterns from the OD matrices with special attention on short trip distances that can be made as active trips, including transit accessibility. Based on this information, CONSULTANT will provide estimates of the percentage of trips that have trip distances that can be served by active modes or electric micromobility.
- **Equity Area Travel.** The ABM will be used to map the travel to and from equity priority areas identified in Task 3. This mapping effort can either work from a continuous equity index, but preferably binary equity areas to evaluate where equity priority communities might live, and destinations they need to connect with for quality-of-life services. This will be presented alongside the active trip potential analysis in a supplemental interactive dashboard.
- **Traveler Alignment.** The "desire lines" between OD pairs can be used to evaluate the alignment of study corridors to existing short, active, and equity area originating trips. The corridor maps will use an advanced geospatial conflation technique that associates these trips to the corridor study segments based on every desire line's number of trips, proximity, trip length, and parallelism (alignment) with the corridor study segments. These corridor demand scores will help identify where large numbers of active potential trips align with the desire lines of existing traveler activity

CONSULTANT will prepare an interactive dashboard or mapping tool to allow for PAG, member agencies, stakeholders, and the public to view and explore a subset of mapping analyses that will be conducted as part of Task 4.3. This tool will make exploring the overlap between these analyses that will lead into project prioritization.

Task 4.4. Safety Analysis

CONSULTANT will gather the most recent five years of data available of motor vehicle-pedalcycle (bicycle)/pedestrian collision data from the ADOT ACIS and relevant PAG region safety data.

CONSULTANT will use collision datasets to identify collision trends, and to map severity-weighted densities for all bike and pedestrian collisions along study corridors.

CONSULTANT will assign severity weights to each crash according to its injury severity rating, with fatal crashes receiving the highest weights.

Task 4.5. Connectivity Analysis

CONSULTANT will use the LTS developed in Task 4.1 to evaluate connectivity across the region. This network analysis will also consider how bicycle, pedestrian, micromobility, and trail/shared use path networks connect regionally utilizing planned facility information.

CONSULTANT will prepare heatmaps demonstrating the connectivity of the street network when accounting for LTS and when not accounting for LTS. The connectivity can be scored at the facility level or as a hex grid covering the region.

CONSULTANT will include analysis and evaluation of first-last mile travel to transit stops and stations.

Task 4.6. Corridor Selection and Identification

CONSULTANT will collaborate with PAG to identify up to three packages of network corridors for final consideration. The Task 4 analyses will be used alongside public engagement, planned active transportation facilities by jurisdictions, and planned transit services to identify corridors and priority projects. Additionally, prioritization of network segments and corridors using outcome-based criteria (Prioritizing Pedestrian Needs), including carbon reduction benefits defined in Task 6, will be used for prioritization and public demonstration of trade-offs and benefits.

Task 4.7. Public and Stakeholder Engagement Round 2 – Recommendations Review

CONSULTANT will prepare for and conduct the second round of public and stakeholder engagement, which will include a variety of in-person and virtual engagement strategies, with three emphases:

1. Present the high-priority network corridor package alternatives for review and comment
2. Provide the draft priority active transportation projects
3. Obtain feedback and comments on the high-priority corridors and proposed priority projects

CONSULTANT will create a web map that will allow the public to explore and review the proposed projects and provide comments or upvotes. The web map will be developed using PublicCoordinate and will be linked from the project-specific page on the PAG website.

CONSULTANT will collaborate with PAG staff to identify up to four pop-up locations/piggyback events or two public open houses to provide opportunities for the public to comment in person and to direct them to virtual engagement options.

Task 4.8. Working Paper 3 – Alternatives Analysis and Draft Recommendations

CONSULTANT will document the process and results of Task 4 activities in a draft working paper, which will be submitted to PAG staff for review.

CONSULTANT will finalize Working Paper 3 based on PAG comments.

Task 4.9. PAG Committee Updates – Round 2

CONSULTANT will provide virtual or in-person presentations to the PAG TPC, Management Committee, and Regional Council as directed by PAG staff. This update will present results of the technical analyses conducted in Task 4 and public engagement results.

Task 4 Deliverables

- Draft and final outputs from the LTS, Equity and Public Health, ABM Analysis, Safety Analysis, and Connectivity Analysis

- Virtual and in-person public engagement materials and advertisements
- Initial packages of network corridors
- Draft and final *Working Paper 3: Alternatives Analysis and Draft Recommendations*
- PAG committee update preparation, presentation, and summary notes

TASK 5. ACTIVE TRANSPORTATION TOOLBOX

Task 5.1. Active Transportation Toolbox Outline

CONSULTANT will develop an outline of the Active Transportation Toolbox that will include desired on- and off-street active transportation treatments identified through the first round of public and stakeholder outreach as well as national best practices. The outline will include placeholders for a series of guidelines for the contexts in which the treatments are recommended (e.g., functional classification or traffic speed on roadway, character of the surrounding area, etc.).

Task 5.2. Active Transportation Toolbox Working Session

CONSULTANT will hold an in-person, interactive working session with PAG staff and a small group of stakeholders to define the context appropriateness of preferred active transportation treatments.

Task 5.3. Design Standards

CONSULTANT will develop design standards for preferred treatments and ancillary infrastructure that will prioritize the comfort, safety, and ease of use for active transportation users. Examples of treatments that standards or guidelines could be developed for include:

- Shared-use paths
- Rural paved shoulders
- Traffic calming measures
- Transit integration
- Active transportation-scale lighting
- Shade structure and guidelines
- Wayfinding infrastructure
- Protected intersections
- Bike box pavement markings
- Cycle tracks/protected bike lanes
- Pedestrian activated crosswalks
- Mid-block crossing refuges
- Bicycle and pedestrian priority/signal preemption
- Amenities (drinking fountains, restrooms, bicycle parking)

Task 5.4. Working Paper 4 – Active Transportation Toolbox and Executive Summary

CONSULTANT will document the process and outcomes of Task 5 activities into Working Paper 4, which will be submitted to PAG staff for review and comment.

CONSULTANT will work with appropriate PAG staff to integrate the Active Transportation Toolbox content into the PAG website in an interactive and visually appealing format.

CONSULTANT will develop a graphical, public-facing Active Transportation Toolbox Executive Summary that can be used by PAG and member agencies to appropriately select context-appropriate active transportation facilities in their local jurisdictions.

CONSULTANT will finalize Working Paper 4, the interactive website format, and the Active Transportation Toolbox Executive Summary based on PAG comments.

Task 5 Deliverables

- Active Transportation Toolbox outline
- Active Transportation Toolbox working session materials, coordination, and summary notes
- Draft and final *Working Paper 4: Active Transportation Toolbox*
- Draft and final content for the interactive toolbox on the PAG website
- Draft and final Active Transportation Toolbox Executive Summary

TASK 6. CARBON REDUCTION BENEFITS

Task 6.1. Vehicle Miles Traveled and Greenhouse Gas Scenario Planning

CONSULTANT will develop a climate benefit analysis that identifies potential reduction in emissions based on plan implementation. Analysis will be based on Task 4 analyses that utilized the PAG ABM. Analysis will examine the current rates of active and short trips that can be served by active modes or electric micromobility and will estimate the low and high annual emission reductions possible because of conversions of short trips to walking, biking, or electric micromobility utilizing preferred scenarios. Analysis will be grounded in the current rates of short trip taking around a ½ mile area of the planned active network, and potential rates of conversion based on available literature, federal emission factors, travel survey results, and comparable jurisdictions.

CONSULTANT will conduct an economic and public health benefits analysis that summarizes the quantitative and qualitative economic impact and health benefits of major active transportation facilities and applicable Environmental Protection Agency-approved Transportation Control Measures as well as those related to the environment. Analysis will estimate daily and annual trips, indirect impacts such as job creation, tourism impacts, health impacts, and environmental benefits. Analysis will follow United States Department of Transportation guidelines to measure, in dollar terms, the project's net present value to society as calculated from the stream of costs and benefits that will result from implementing the plan.

Task 6.2. Working Paper 5 – Carbon Reduction Benefits

CONSULTANT will document the process and results of Task 6 activities in Working Paper 5 which will be submitted to PAG staff for review.

CONSULTANT will finalize Working Paper 5 based on PAG comments.

Task 6 Deliverables

- Draft and final outputs from the carbon reduction and health analyses
- Draft and final *Working Paper 5: Carbon Reduction Benefits*

TASK 7. DEVELOP PAG RATP

Task 7.1. Draft RATP and Executive Summary

CONSULTANT will prepare a draft ATP document that includes prioritized project recommendations, local and regional policy recommendations, implementation responsibilities, policy and programming guidelines for incorporation into RMAP, identification of potential implementation funding sources, the active transportation toolbox, and a graphical public-facing executive summary.

CONSULTANT will submit draft document to PAG staff for an initial review.

CONSULTANT will update RATP based on PAG comments.

Task 7.2. Public and Stakeholder Outreach Round 3 – Draft RATP Promotion

CONSULTANT will prepare for and conduct the third round of public and stakeholder engagement, which will include a variety of in-person and virtual engagement strategies, with two emphases:

1. Informing the public that the draft RATP document is available for review and how to provide comments
2. Promote the high-priority projects and steps required to implement these projects after project completion

CONSULTANT will create content to update the project website with the draft RATP document and an opportunity for the public to provide comments on the draft document.

CONSULTANT will work with PAG staff and the TWG to determine what types of advertisements are desired and will provide content for PAG and member agencies to promote the draft plan. Examples of potential advertisements include: a press release, social media content, or flyer design.

CONSULTANT will work with PAG staff to identify up to four pop-up locations/piggyback events or two public open houses to provide opportunities for the public to comment in person and to direct them to virtual engagement options.

Task 7.3. RATP Adoption

After addressing comments on the draft RATP from PAG staff, CONSULTANT will present the draft RATP to the PAG TPC, Management Committee, and Regional Council for final adoption.

The CONSULTANT will also conduct up to nine virtual presentations on the draft RATP to PAG member agency city council or planning commission meetings as directed by PAG. These presentations will include an overview of the project process, public engagement results, technical analysis results, and priority recommended projects.

Task 7.4. Final RATP and Executive Summary

CONSULTANT will finalize the RATP document and executive summary based on comments from PAG committees, member agencies, and the public.

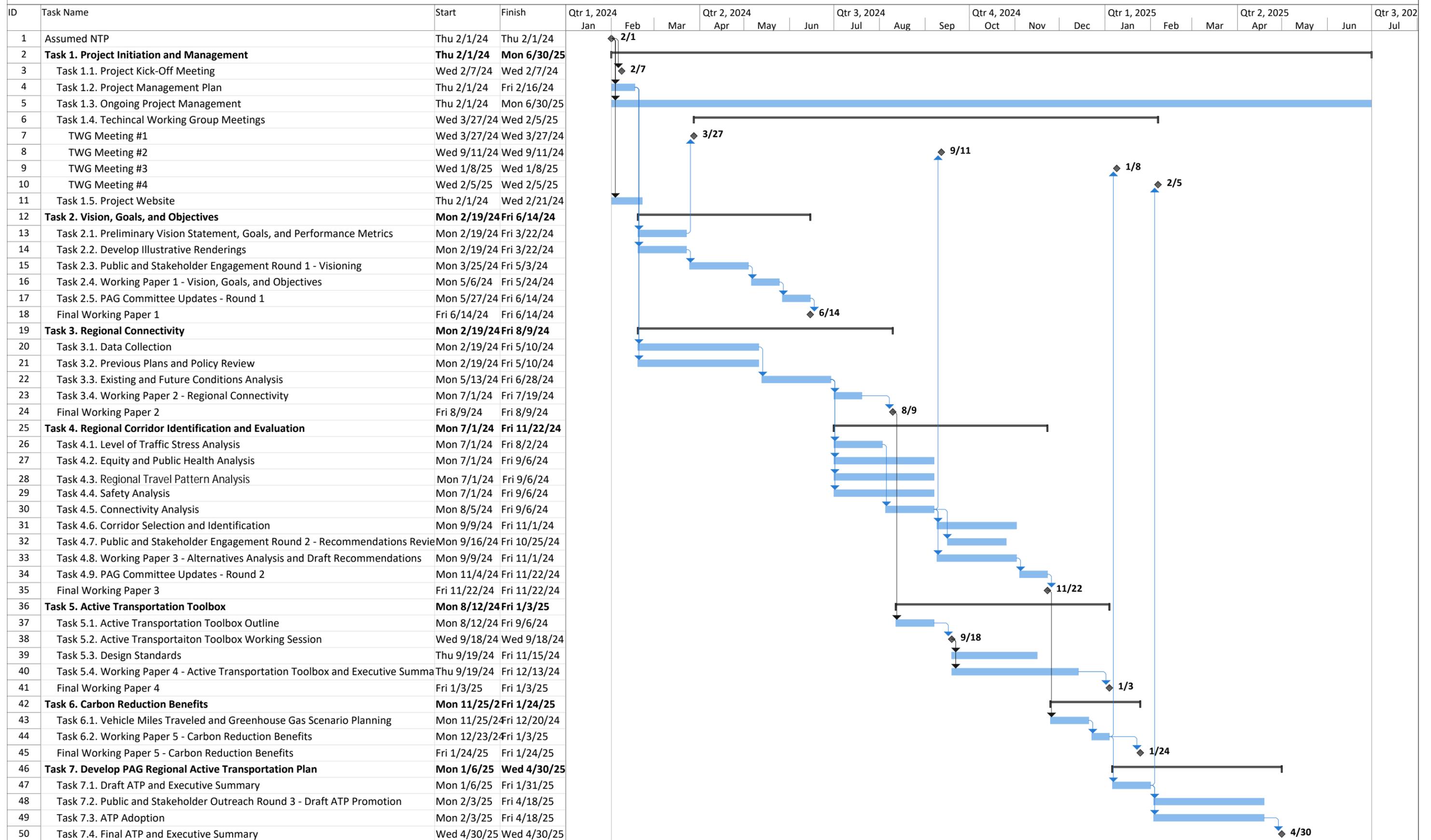
CONSULTANT will provide the RATP document and executive summary in editable InDesign and PDF formats.

CONSULTANT will provide any relevant Geographic Information System (GIS) data that was generated throughout the RATP planning process.

Task 7 Deliverables

- Draft RATP document and executive summary
- Public engagement materials and advertisements
- RATP adoption presentation materials
- Final RATP document and executive summary
- GIS data

PAG Regional Active Transportation Plan



Communication #3787

SUBJECT: Dynamic Traffic Assignment Model Contract

Meeting	Meeting Date	Agenda Category	Agenda Item #
Regional Council	January 25, 2024	Action	8

REQUESTED ACTION/SUGGESTED MOTION

The Regional Council will be asked to authorize the executive director to negotiate and execute a contract with the amount not to exceed \$200,000 with Caliper Corporation to develop a regional Dynamic Traffic Assignment model for travel demand modeling improvement and air quality modeling support.

ASSOCIATED OWP WORK ELEMENT/GOAL

Work Element 40: Transportation Activities

SUMMARY

PAG has been actively engaged in the development of sophisticated regional models including an activity-based model (ABM) and a regional dynamic traffic assignment (DTA) model. In accordance with the adopted FY2020-2021 OWP Table 6, listed as “Modeling support services,” PAG underwent a rigorous technical review of software options and procured the DTA model software, TransModeler, identifying it as the optimal tool. Enhancing travel demand modeling and supporting air quality analyses, including the EPA MOVES model, would be advantageous. Further refinement of the DTA model is recommended to leverage its benefits and accurately depict individual vehicle behavior, thereby enhancing the realism of travel behavior representation.

Through the improvement, this project focuses on:

- Calibration and validation of the current regional DTA model
- Development of the overall DTA model application procedure
- Development of outputs to improve the existing EPA’s MOVES model
- Improvement of estimates for the EPA’s National Emissions Inventory (NEI)
- Exploration of congestion mitigation measures around specific congested areas

Caliper is a software developer and technical service provider for PAG's current two regional modeling software, TransCAD and TransModeler through software maintenance subscriptions.

Pursuant to PAG's procurement policy, it is recommended that PAG engage Caliper for additional desired professional services in support of the DTA model development, since it is impracticable for any other vendor to access Caliper's proprietary software.

Using any other vendor could particularly pose challenges when addressing unforeseen software issues, potentially having a negative impact on our ability to support PAG's ongoing planning efforts. Given Caliper's expertise with dynamic traffic assignment model (DTA) support and application development, contracting directly with Caliper is preferred due to their unique propriety software and qualifications.

PRIOR BOARD AND/OR COMMITTEE ACTION

Listed as "DTA model development for regional congestion mitigation and air quality model improvement" in Table 6 budget approved for FY 2024 and FY 2025 PAG OWP on May 25, 2023.

FINANCIAL CONSIDERATIONS

Upon Regional Council approval, staff will finalize a fee proposal and enter into a contract with Caliper Corporation. Contract amount not to exceed \$200,000. Expenditures will occur during FY 2024.

TECHNICAL, POLICY, LEGAL OR OTHER CONSIDERATIONS

ADOT Carbon Reduction Strategy to FHWA of Nov. 15, 2023, details PAG's CRP projects/strategies within the Transportation Activities, Travel Reduction, Commuter Services, and Regional Modeling work elements in line with the ADOT CRP-eligible projects list.

ATTACHED ADDITIONAL BACKUP INFORMATION

- The scope of work for the contracted services is attached.
- Memo for continuing procurement

Staff Contact/Phone	<p>Farhad Moghimi, (520) 792-1093, ext. 4420 David Atler, (520) 495-1093, ext. 4443 Hyunsoo Noh, (520) 792-1093, ext. 4457 James Tokishi, (520) 792-1093, ext. 4456</p>
----------------------------	--



SCOPE OF WORK:

PAG DTA Model Development and Implementation

OVERVIEW

As required by federal requirements for MPOs, PAG executes regional transportation planning efforts as well as coordinates environmental impact analyses and regional economic development discussions with PAG's 9 jurisdictional partners and stakeholders. For its long-range transportation plan, called the Regional Mobility and Accessibility Plan (RMAP), and the five-year transportation funding program, called the Transportation Improvement Program (TIP), PAG develops, maintains, and improves regional models for land-use, travel demand, and air quality (AQ). Beyond the fundamental model maintenance, PAG has adopted and developed advanced regional models including an activity-based model (ABM) and dynamic traffic assignment (DTA) model to demonstrate more accurate and realistic regional traffic patterns and detailed behavioral analyses to support regional transportation planning efforts including congestion mitigation, traffic safety improvement, and equity and AQ improvement.

OBJECTIVE

To further improve travel demand modeling, and support air quality analyses, including the EPA MOVES model, further development of the DTA model would be beneficial. This project focuses on the calibration and validation of the current regional DTA model, guide the development of the overall DTA model application procedure, develop outputs to improve the existing MOVES model, improve estimates for the EPA's National Emissions Inventory, and conduct an exploration of congestion mitigation measures around specific congested areas, such as K-12 schools.

TASKS

The tasks below will guide the CONSULTANT to develop individual targets and budget.

- TASK 1: Introduction
 - Kick-off meeting
- TASK 2: Acceptance Criteria Development



- Review acceptance criteria and calibration validation methods used in successful DTA implementations. Review and document key findings for congestion mitigation and air quality conformity.
- Develop acceptance criteria with performance measures based on appropriate conceptual and practical criteria.
- **Deliverables:** Task memorandum of sound practices, suggested calibration and validation approaches, and acceptance criteria.
- TASK 3: Input Data Development
 - Review and develop the model inputs and calibration/validation data.
 - Review connected vehicle (CV) data for the region and derive important calibration/validation metrics from the data.
 - **Deliverables:** Task memorandum of the data development
- TASK 4: DTA Model Calibration and Validation
 - Based on input data development (TASK 3) and acceptance criteria development (TASK 2), develop a regional draft DTA model satisfying the target.
 - Identify the gaps between PAG ABM and DTA model outputs and develop steppingstones of ABM-DTA integration.
 - **Deliverables:** Task memorandum of calibration and validation and PAG ABM and DTA gap analysis and
- TASK 5: AQ Model Input Development
 - Prepare AQ conformity data inputs and requirements and develop the inputs of EPA's MOVES and national emission inventory (NEI) support.
 - **Deliverables:** Model script for interfacing with MOVES
- TASK 6: DTA Model Application Guidance
 - Prepare written guidance documenting how to prepare scenarios in the DTA model and perform before-and-after analyses to estimate the impacts of traffic congestion mitigation measures.
 - **Deliverables:** Memorandum outlining steps for performing before-and-after analyses
- TASK 7: Documentation
 - **Deliverables:** Final report with developed methodology and relevant GISDK scripts
- TASK 8: Training and Application Support
 - Conduct a training workshop focusing on DTA model applications.
 - Provide 30 hours of technical application support to PAG
 - **Deliverables:** Two-day training workshop and

TASK 1: Introduction

Successful DTA model development and delivery will hinge on the collective contributions of PAG and CONSULTANT. Whereas CONSULTANT will be responsible for the work described in these tasks, PAG will be relied upon to provide:

1. input and concurrence relating to critical model design decisions during the execution of the work,
2. data and support relating to PAG regional travel demand model and validation data maintained by PAG and that are needed to perform the model development, validation, and integration tasks,
3. Various data preparation and modeling tasks needed to make the project feasible with a limited budget, and
4. contact with jurisdictional partners and stakeholders who may be in a position to share other data sources of benefit to the model.

CONSULTANT will assume the responsibility of project coordination, which will include:

1. defining the roles and responsibilities of key PAG and CONSULTANT personnel,
2. providing an overall technical approach for the DTA
3. identifying data sources, with help from PAG,
4. assembling and fusing data in a manner compliant with each data source's terms of use,
5. Implementing the DTA model and demonstrating its application
6. maintaining communication with PAG and a pace of work in keeping with the project schedule.

CONSULTANT will convene a kick-off meeting to begin the project and will use the meeting to work together with PAG to identify data sources and contacts and to discuss tasks, schedule, and priorities.

TASK 2: Acceptance Criteria Development

CONSULTANT will review recent experiences with successful DTA projects and recommended approach in DTA practice for:

1. regional DTA development and calibration,
2. validation performance measures and acceptance criteria, and
3. DTA deployment for congestion mitigation and AQ conformity applications.

Since there have been very few deployed DTA models, the consultant will examine successfully deployed models and their characteristics.

The findings from the review will be discussed with PAG to:

1. Inform discussion between PAG and CONSULTANT aimed at deciding acceptance criteria, and

2. shape the work in the tasks that follow, e.g., by adopting sound modeling methods and practices. CONSULTANT will also identify new methods that could lead to breakthroughs in DTA models.

CONSULTANT will produce a technical memorandum summarizing the review, key findings, and consequent recommendations for the remaining tasks.

TASK 3: Input Data Development

CONSULTANT will take delivery of the draft DTA model developed by PAG in its most current form and review it for:

1. Currency with respect to high-resolution imagery,
2. Consistency with respect to the PAG regional demand model,
3. Completeness in terms of DTA model input requirements, and
4. Quality of the model's inputs (e.g., roadway geometry, signal timing data, etc.).

In conducting this review, CONSULTANT will identify any critical gaps in the model's inputs.

The review will entail:

1. Studying and examining the model's inputs,
2. Running the model and reviewing warnings, error messages, and other signs of problems in the model's specification,
3. Visually auditing the model for correctness, and
4. Examining the model's outputs for reasonableness.

Data needs will be cross-referenced with data sources and availability identified in the kick-off meeting. Any critical data needs not satisfied by available data will be brought to PAG's attention and a plan either to obtain or to continue without the data will be devised with concurrence from PAG.

In addition to reviewing the DTA model's inputs, CONSULTANT will prepare data with which to calibrate and validate the model in the following task.

Specifically, CONSULTANT will:

1. Review and expand upon a detailed data inventory prepared by PAG, which will be documented with a view to providing guidance for the model's future improvement and maintenance. Data identified during the kick-off meeting will be included in the inventory and assembled with the help of PAG and its jurisdictional partners.
2. Analyze "Big" data to derive important metrics useful for model calibration and validation. These metrics will include, but are not limited to, origin-destination (OD) patterns, temporal distribution of trip departures, and distributions of model parameters such as travel speeds under free-flow operating conditions.

Connected vehicle (CV) data are a rich source of valuable model calibration and validation data. CONSULTANT will leverage access to recent CV data specific to the PAG region for a modest data license fee of \$20,000. This fee covers license to use the data with TransModeler and does not include sale or transmission of the data set in its original format. Rather, the data will be delivered to PAG in the form and format in which it is used to develop the DTA model. PAG will have a license to use the delivered data in conjunction with TransCAD and TransModeler.

CONSULTANT will make use of CV data processing tools already at its disposal and customized to the data set. Efficiencies derived from these pre-existing tools and from CONSULTANT's recent relevant experience with data set will yield efficiencies offsetting the license fee.

CONSULTANT will produce a technical memorandum summarizing the model's inputs, the source of those inputs, and any gaps in model inputs and how they might be filled in future work.

CONSULTANT with some assistance from PAG will also complete the preparation of all model inputs from the respective data sources and deliver to PAG a working draft model with commentary on any obvious issues.

TASK 4: DTA Model Calibration and Validation

The draft model completed in Task 3 will serve as the starting point for the model calibration and validation effort, the goal of which will be a DTA solution in which key model performance metrics match observed data to a degree satisfying the calibration and validation targets decided in Task 2.

This goal will largely be achieved by adjusting the DTA model's inputs and parameters. Where the inputs are derived from the PAG regional travel demand model, CONSULTANT will provide guidance to PAG where adjustments may be needed in the regional model to improve the quality of its own outputs before they are used as inputs to the DTA.

Achieving satisfactory validation may require significant adjustment of the demand inputs. This adjustment process will raise, and potentially answer, important questions on the model's eventual integration with the PAG ABM. One objective of that integration is the ability to rely exclusively on the ABM for demand inputs without the need for adjustment and without degrading the quality of the validation.

The process of validating the DTA will thus also yield useful insights into the ABM and where improvements can be made to pave the way for ABM-DTA integration. CONSULTANT will identify those improvements and document them along with model validation results in a tech memo.

TASK 5: AQ Model Input Development

CONSULTANT will work together with PAG to understand the input requirements of the MOVES emissions model used for its AQ modeling activities. Working from this understanding,

CONSULTANT will develop an add-in implemented in the TransCAD/TransModeler scripting environment GISDK to derive those inputs (e.g., average link speeds) from DTA model outputs.

This add-in will bridge the DTA and MOVES models to help integrate the DTA model into PAG's AQ conformity analysis procedures. CONSULTANT will demonstrate application of the add-in through before-and-after AQ analyses aimed at evaluating a proposed project.

CONSULTANT will summarize the AQ model input development approach and application results in a technical memorandum.

TASK 6: DTA Model Application Guidance

CONSULTANT will develop a technical memorandum outlining a methodology for applying the DTA model to estimate the impacts of projects, including analysis of congestion mitigation measures. This will provide a roadmap for PAG to follow in its application of the model for before-and-after analyses.

TASK 7: Documentation

Near the conclusion of the project, the methods and findings documented in technical memorandum in each of the preceding tasks will be summarized in a compendium project report with conclusions, lessons learned, and recommended practices for the model's maintenance.

TASK 8: Training and Application Support

CONSULTANT will conduct a two-day in-person training workshop to teach PAG staff and individuals PAG wishes to invite to participate. Participants may include individuals from jurisdictional partner agencies, FHWA, or consultants at PAG's discretion.

The training workshop will focus on teaching participants how to use the DTA model to perform before-and-after analyses like those discussed in the guidance described in Task 6.

CONSULTANT will provide 30 hours of model application support to PAG and/or jurisdictional partners following the training and delivery of the memorandum on model application guidance produced in Task 6.

BUDGET

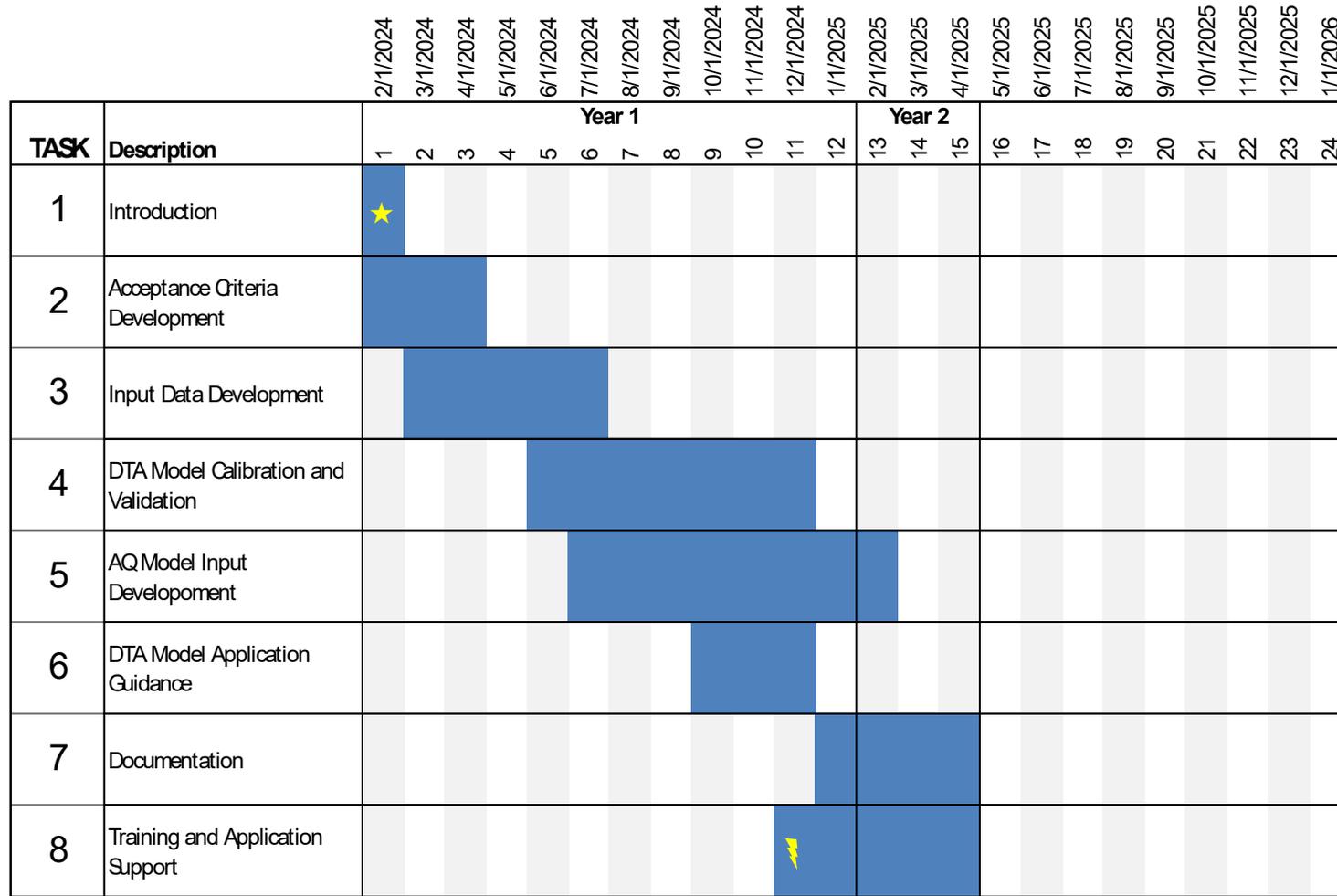
An estimate of the hours and budget to complete the work described is below in Table 1.

Table 1. Estimated budget by task

HOURS BY PERSONNEL AND TASK DESCRIPTION																			
TASK	1		2		3		4		5		6		7		8		TOTAL		
Personnel	Maximum Hourly Rate	Introduction		Acceptance Criteria Development		Input Data Development		DTA Model Calibration and Validation		AQ Model Input Development		DTA Model Application Guidance		Documentation		Training and Application Support			
		Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost
LABOR																			
President	\$325	1	\$325	1	\$325	2	\$650	2	\$650	0	\$0	0	\$0	0	\$0	0	\$0	6	\$1,950
Vice President	\$290	1	\$290	0	\$0	6	\$1,740	2	\$580	0	\$0	0	\$0	0	\$0	0	\$0	9	\$2,610
Project Manager	\$275	5	\$1,375	6	\$1,650	24	\$6,600	40	\$11,000	32	\$8,800	8	\$2,200	24	\$6,600	32	\$8,800	171	\$47,025
Software Engineer	\$275	0	\$0	0	\$0	0	\$0	0	\$0	100	\$27,500	0	\$0	0	\$0	0	\$0	100	\$27,500
Transportation Scientist	\$250	2	\$500	8	\$2,000	40	\$10,000	40	\$10,000	8	\$2,000	0	\$0	0	\$0	0	\$0	98	\$24,500
GIS Specialist	\$250	0	\$0	0	\$0	40	\$10,000	0	\$0	0	\$0	0	\$0	0	\$0	0	\$0	40	\$10,000
Planner/Engineer	\$225	4	\$900	4	\$900	64	\$14,400	96	\$21,600	40	\$9,000	24	\$5,400	32	\$7,200	24	\$5,400	288	\$64,800
TOTAL LABOR		13	\$3,390	19	\$4,875	176	\$43,390	180	\$43,830	180	\$47,300	32	\$7,600	56	\$13,800	56	\$14,200	712	\$178,385
REIMBURSABLE EXPENSES																			
Data Collection		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	\$0
Copying/Printing		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	\$0
Travel		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	\$1,500	--	\$1,500
Support Lump Sum		--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	\$0
CV Data License		--	--	--	--	--	--	--	\$20,000	--	--	--	--	--	--	--	--	--	\$20,000
TOTAL REIMBURSABLE EXPENSES		--	\$0	--	\$0	--	\$0	--	\$20,000	--	\$0	--	\$0	--	\$0	--	\$1,500	--	\$21,500
GRAND TOTAL		13	\$3,390	19	\$4,875	176	\$43,390	180	\$63,830	180	\$47,300	32	\$7,600	56	\$13,800	56	\$15,700	712	\$199,885

SCHEDULE

An estimated schedule to complete the tasks described in this scope of work is below in Figure 1.



★ Kick-off meeting ⚡ Training workshop

Figure 1. Estimated project schedule by task

MEMO

TO: Farhad Moghimi, Executive Director

FROM: Dave Adler, Deputy Executive Director and
Hyunsoo Noh, Ph.D., Modeling Administrator

DATE: October 2, 2023

SUBJECT: DTA Model Development – Request for Continuing Procurement as sole-source

Based on the FY2020-FY2021 OWP Table 6, “Modeling support services” adopted on May 23, 2019, by the Regional Council and MEMO for “Dynamic Traffic Assignment Model Review and Selection” dated on June 2, 2021 including a meticulous selection process to determine the best DTA modeling software for PAG’s modeling purposes, PAG embarked on a transition to a new regional DTA model, TransModeler from Caliper Corporation (Caliper) (PR22-010 approved on July 12, 2021). Since 2021, PAG modeling team has been using the TransModeler for PAG’s in-house regional Dynamic Traffic Assignment (DTA) model development. PAG’s dedicated staff has been actively engaged in the development and testing of this regional DTA model, aimed at improving the representation of travel behaviors and traffic patterns while addressing the limitations inherent in the current static traffic assignment used in the existing travel demand model and new Activity Based Model (ABM).

Caliper has consistently delivered exceptional technical support to PAG over the years; not only for TransCAD model but also for TransModeler. They have provided valuable support for the foundational development of the DTA model and have promptly addressed any technical issues related to the DTA software.

The new regional DTA model accurately captures real-world travel behaviors. It factors in a traveler’s chosen path, which is influenced by their departure time and the prevailing traffic conditions, including road congestion and traffic signal delays. Moreover, the model ensures that traffic flows adhere to the physical roadway capacity, preventing the overallocation of vehicles along assigned roadway segments and intersections.

Furthermore, this model has the added benefit of generating more realistic regional traffic patterns for the Environmental Protection Agency’s (EPA) MOVES air quality model and the

national emission inventory (NEI) update. For instance, it provides detailed speed profiles for each hour, as opposed to the current practice of utilizing only four time-of-day speed profiles (i.e., AM, PM, mid-day, and night), thereby enhancing the accuracy of the data.

Given this background, it is now time to embark on the development of the DTA model. Collaborating with a team of qualified and experienced professionals will facilitate a smoother and more efficient transition, especially given our constrained time budget.

Caliper is a software developer and technical service provider for PAG's current TransCAD and TransModeler software. With an established track record of offering technical services and an in-depth understanding of PAG's transportation software, Caliper provides a positive and robust working relationship with PAG staff. This relationship is expected to facilitate more seamless communication and cost-effective development of the DTA model.

Given Caliper's extensive service history and the advantages outlined earlier, we anticipate significant time savings through additional contracted support services, beyond software support services. If PAG were to engage in a separate consultant selection process, we do not expect any vendors with the same level of understanding of the model because of their lack of access to Caliper's proprietary software. This could particularly pose challenges when addressing unforeseen software issues, potentially having a negative impact on our overall ability to support various planning efforts.

Given Caliper's expertise in assisting PAG staff with dynamic traffic assignment model (DTA) support and application development, we highly recommend continuing this work with Caliper due to their unique qualifications.

In compliance with section 5.2 of the PAG's procurement policy, it is impractical to solicit competitive bids for the above referenced professional services, primarily due to the proprietary nature of the work that has already been developed through previous procurement activities.

Specifically, the utilization of a particular technology is deemed essential, emphasizing the advantages of standardization.

Furthermore, the acceptance of substitute technologies is deemed impracticable, given the unique nature of the sought-after product.

Communication #3788

SUBJECT: Arizona Department of Transportation (ADOT) Safety Performance Projections for 2024

Meeting	Meeting Date	Agenda Category	Agenda Item #
Regional Council	January 25, 2024	Action	9

REQUESTED ACTION/SUGGESTED MOTION

The Regional Council will be asked to adopt the ADOT safety performance projections for 2024.

ASSOCIATED OWP WORK ELEMENT/GOAL

Work Element 40, Transportation Planning

SUMMARY

FAST Act Requirement

As part of the federal 2015 FAST Act, performance measures are used to track progress toward national goals originally established in MAP-21, the prior federal surface transportation legislation. Goals include improving safety, infrastructure condition and system reliability on public roads.

The FAST Act requires state departments of transportation (DOTs) to develop annual projections for safety performance on public roadways in the state.

Statewide Transportation Safety Performance Projections

On Aug. 31, 2023, the Arizona Department of Transportation (ADOT) formally established safety projections for the state of Arizona for 2024. The following safety projections apply statewide for the 2024 calendar year and are based on five-year rolling averages:

- Number of Fatalities 1,286.1
- Rate of Fatalities/100M VMT 1.745
- Number of Serious Injuries 3,636.0
- Rate of Serious Injuries 5.001
- Number of Non-motorized Fatalities and Serious Injuries: 883.35

The safety projections set by ADOT are required to be data-driven and realistic. They are intended to keep the state focused on improving safety while still striving for the goal of the Arizona Strategic Transportation Safety Plan (STSP) and the State Strategic Highway Safety Plan (SHSP) of reducing the number of fatalities and serious injury crashes in the greater Tucson region and the state of Arizona by 3% to 5% and ultimately achieving the vision of zero fatalities.

Background

The FAST Act federal performance requirements took effect for the year 2018. PAG has adopted the ADOT safety performance projections every year since (2018, 2019, 2020, 2021, 2022 and 2023).

The federally required projections for safety are distinctly different from the state and regional goals and objectives for safety. The safety goals and objectives represent a desired state of reduced fatal and injury crashes. The safety projections represent the projected performance of safety based on existing data and current trends, i.e., how many crashes are expected based on trends shown in the data. Safety projections identify where the state expects safety numbers to land in 2024 for fatal and injury crashes, fatality and injury rates, and bicycle and pedestrian fatal and serious injury crashes. ADOT reviewed 10 years of crash data and projected changes with current programming in the development of these statewide projected performance projections for all public roads regardless of ownership.

PRIOR BOARD AND/OR COMMITTEE ACTION

- Current cycle: PAG's Transportation Planning Committee and Transportation Systems and Safety Subcommittee recommended adoption of 2024 safety projections on Dec. 20, 2023, and Nov. 9, 2023, respectively.
- Previous cycles: PAG's Regional Council previously adopted ADOT annual safety projections on Jan. 26, 2023, Jan. 27, 2022, March 25, 2021, Jan. 30, 2020, Jan. 31, 2019, and Jan. 25, 2018.

FINANCIAL CONSIDERATIONS

None.

TECHNICAL, POLICY, LEGAL OR OTHER CONSIDERATIONS

None.

ATTACHED ADDITIONAL BACKUP INFORMATION

None.

Staff Contact/Phone	Farhad Moghimi, (520) 792-1093, ext. 4420 David Mitchell, (520) 792-1093, ext. 4462 Jeanette DeRenne, (520) 792-1093, ext. 4477 David Atler, (520) 792-1093, ext. 4443
----------------------------	---

Communication #3789

SUBJECT: FY 2022 - FY 2026 PAG Transportation Improvement Program (TIP) Amendment #2022.090

Meeting	Meeting Date	Agenda Category	Agenda Item #
Regional Council	January 25, 2024	Action	10

REQUESTED ACTION/SUGGESTED MOTION

The Regional Council will be asked to approve an amendment to the PAG FY 2022–FY 2026 Transportation Improvement Program (TIP), which would adjust the programming of Arizona Department of Transportation (ADOT) funds on two ADOT projects.

ASSOCIATED OWP WORK ELEMENT/GOAL

Work Element 40, Transportation Activities

SUMMARY

As the region’s designated metropolitan planning organization (MPO), PAG is responsible for maintaining the Transportation Improvement Program (TIP), including processing amendments to the FY 2022–FY 2026 TIP.

One of the duties assigned to this task is the programming of Arizona State Department of Transportation (ADOT) funds that are to be spent on ADOT projects in the PAG planning area. These funds are primarily federal funds that are referred to in the TIP as ASTBG or ASTP, with funding allocation amounts determined through the ADOT Resource Allocation Advisory Committee (RAAC). The funding allocation is then programmed on the state highway system in the PAG TIP in partnership with the ADOT Multimodal Planning Division (MPD) and the South-Central District.

As reflected in the attached proposed TIP amendment funding tables, ADOT has requested a formal TIP amendment to make funding adjustments to two major projects. These include:

- Item A. Reduces FY 2024 ASTBG programmed on TIP ID 38.13, I-19: Irvington Rd Traffic Interchange in the amount of \$3,335,000 to be reprogrammed on TIP ID 9.23. The funding is no longer needed for right of way on this project.

- Item B. With the funding previously programmed on TIP ID 38.13, programs \$3,335,000 of FY 2024 ASTBG for construction on TIP ID 9.23, I-10: Country Club Rd. and Kino Interchanges and reduces the programming by the same amount in FY 2026 (\$3,335,000) to keep the total amount of project funding unchanged.

These programming changes ensure that the full FY 2024 PAG region ASTBG allocation obligates in the year of apportionment.

PRIOR BOARD AND/OR COMMITTEE ACTION

The Management Committee recommended approval of this amendment. Please see the text below regarding the expedited process for formal TIP amendments.

FINANCIAL CONSIDERATIONS

ASTBG funds must be programmed in the PAG FY 2022–FY 2026 Transportation Improvement Program for the state apportionments to be programmed in the state STIP or eSTIP.

TECHNICAL, POLICY, LEGAL OR OTHER CONSIDERATIONS

This is a formal TIP amendment for the funding allocation process.

The TIP Policies and Procedures allow for expediting TIP amendments as referenced in Appendix 3 of the adopted FY 2022–FY 2026 TIP (see PR21.2). Expedited approval involves scheduling the item at either the Transportation Planning Committee (TPC) or Management Committee and placing the item on the agenda for Regional Council. Since the TIP amendment request was submitted after the December TPC meeting, the next committee meeting prior to Regional Council is the Management Committee.

ATTACHED ADDITIONAL BACKUP INFORMATION

- ADOT TIP Amendment Request, dated Jan. 8, 2024.
- Proposed Formal Amendment No. 2022.090 to the PAG FY 2022-FY 2026 TIP.

Staff Contact/Phone	<p>Farhad Moghimi, (520) 792-1093, ext. 4420 Dave Atler, (520) 792-1093, ext. 4443 Jamie Brown, (520) 792-1093, ext. 4473 Carolyn Laurie, (520) 792-1093, ext. 4461</p>
----------------------------	--

Communication #3790

January 8, 2024

Farhad Moghimi, Executive Director
Pima Association of Governments
1 E. Broadway Blvd., Suite 401
Tucson, AZ 85701
fmoghimi@pagregion.com

Dear Mr. Moghimi:

The purpose of this letter is to request an amendment to the FY 2022-2026 PAG Transportation Improvement Program (TIP). This request reprograms \$3,335,000 of FY24 ASTP funding from TIP ID 38.13, Irvington Rd TI, to TIP ID 9.23, Country Club/Kino TI. This programming change ensures the full FY24 PAG region ASTP allocation obligates in the year of apportionment and maintains Country Club/Kino TI programmed at \$500 million.

Details for the TIP amendment are as follows:

38.13 - Irvington Rd TI	FY23	FY24	FY25	FY26
Design (ASTP)	\$290	\$565	\$0	\$0
Design (PAG STBG)	\$4,835	\$0	\$0	\$0
ROW (ASTP)	\$190	\$1,500	\$0	\$0
ROW (PAG STBG)	\$3,165	\$0	\$0	\$0
Construction (ASTP)	\$0	\$0	\$32,012	\$0

9.23 - Country Club/Kino TI	FY23	FY24	FY25	FY26
Design (ASTP)	\$12,000	\$0	\$0	\$0
ROW (ASTP)	\$25,089	\$12,611	\$0	\$0
Construction (ASTP)	\$0	\$149,351	\$123,583	\$142,029
Construction (PAG STBG)	\$0	\$15,337	\$0	\$0
Construction (PAG 2.6)	\$0	\$10,000	\$10,000	\$0

Thank you,

DocuSigned by:

 Mark Hoffman
84B8382CCD59481...
 ADOT/MPD, Planning Program Manager
 602.712.7454
 mhoffman@azdot.gov

Cc: Carolyn Laurie, PAG Programming Manager

TipID	RTAID	STREET/PROJECT NAME	PROPOSED FUNDING (IN THOUSANDS OF DOLLARS)					
			FISCAL YEAR					
SponsorID	Length	LOCATION	TIP STATUS	2022	2023	2024	2025	2026
StateID	Existing Lanes	PROJECT DESCRIPTION		TOTAL COST				
FedID	After Lanes	AQ STATUS						

ITEM A

Existing Approval

38.13	22_a	I-19: Irvington TI I-19 at Irvington Road Traffic Interchange at Irvington Rd. Analyzed Active \$92,880	108 STMatch D	290 STMatch D	565 ASTP D	32012 ASTP C
			1800 STP D	4835 STP D	4835 ASTP R	32012 TOTAL
			1908 TOTAL	190 STMatch R	5400 TOTAL	
				3165 STP R	8480 TOTAL	

Proposed Request

38.13	22_a	I-19: Irvington TI I-19 at Irvington Road Traffic Interchange at Irvington Rd. Analyzed Active \$91,453	108 STMatch D	290 STMatch D	565 ASTP D	32012 ASTP C
			1800 STP D	4835 STP D	1500 ASTP R	32012 TOTAL
			1908 TOTAL	190 STMatch R	2065 TOTAL	
				3165 STP R	8480 TOTAL	

SPONSOR: ADOT ACTION: Reduced \$3,335 of FY24 ASTP ROW and reprogrammed same amount on TIP ID 9.23.

TipID	RTAID	STREET/PROJECT NAME	PROPOSED FUNDING (IN THOUSANDS OF DOLLARS)					
			FISCAL YEAR					
SponsorID	Length	LOCATION	TIP STATUS	2022	2023	2024	2025	2026
StateID	Existing Lanes	PROJECT DESCRIPTION						
FedID	After Lanes	AQ STATUS						

ITEM B

Existing Approval												
9.23 F0548	1.0 4 6	I-10: Country Club Rd & Kino Interchange pr Traffic Interchanges at Country Club R Design, ROW & reconstruction of TIs & I-10 to N/A Active \$500,000		12000 ASTP	D	146016 ASTP	C	123583 ASTP	C	145364 ASTP	C	
				25089 ASTP	R	10000 HURF26	C	10000 HURF26	C	145364 TOTAL		
				37089 TOTAL		15337 STP	C	133583 TOTAL				
						12611 ASTP	R	183964 TOTAL				
Proposed Request												
9.23	1.0 4 6	I-10: Country Club Rd & Kino Interchange pr Traffic Interchanges at Country Club R Design, ROW & reconstruction of TIs & I-10 to N/A Active \$500,000		12000 ASTP	D	149351 ASTP	C	123583 ASTP	C	142029 ASTP	C	
				25089 ASTP	R	10000 HURF26	C	10000 HURF26	C	142029 TOTAL		
				37089 TOTAL		15337 STP	C	133583 TOTAL				
						12611 ASTP	R	187299 TOTAL				
SPONSOR: ADOT			ACTION: Programmed \$3,335 of ASTP to FY24 Construction and reduce FY26 by the same amount.									

SUBJECT: FY 2025 – FY 2029 PAG Transportation Improvement Program (TIP) Development Progress Update and Review of any Available Draft Project Lists

Meeting	Meeting Date	Agenda Category	Agenda Item #
Regional Council	January 25, 2024	Information	11

REQUESTED ACTION/SUGGESTED MOTION

This is an information item.

ASSOCIATED OWP WORK ELEMENT/GOAL

Work Element 40, Transportation Activities

SUMMARY

Staff will be available to provide any updates on the PAG Transportation Improvement Program (TIP) development process, including any draft TIP project lists that are available.

Pima Association of Governments (PAG), as the regional metropolitan planning organization and as required by federal law, prepares a five-year schedule and fund program of proposed transportation improvements within Pima County. The TIP is required to be updated at least every four years and involves a multi-step process in association with PAG’s member jurisdictions and other implementing agencies. The TIP addresses improvements to diverse elements of the regional transportation system including national, state and local highways, transit, bikeways and pedestrian facilities. The TIP also responds to various state and federal regulatory requirements for development of a transportation improvement program.

The attached pie chart shows, by member agency, the Regional Transportation Authority (RTA) distribution of regional dollars for 2007-2029. Fund sources include RTA excise tax, HURF 12.6, HURF 12R, HURF 2.6 and STP/STBG. The preliminary 25-29 TIP projection is based on the formal recommendation from the TIP Subcommittee on Dec. 20, 2023.

Please note that the attached draft ADOT project list was updated on Jan.12, 2024, and, therefore, differs from the version that was included in the Management Committee packet.

PRIOR BOARD AND/OR COMMITTEE ACTION

- On Jan. 17, 2024, an update was provided to the Management Committee.
- On Dec. 20, 2023, a meeting of the TIP Subcommittee was held.
- On Dec. 20, 2023, an update was provided to the TPC.
- On Dec. 14, 2023, a meeting of the Transit Working Group (TWG) was held.
- On Nov. 29, 2023, a meeting of the Transit Working Group (TWG) was held.
- On Nov. 28, 2023, a meeting of the TIP Subcommittee was held.
- On Nov. 15, 2023, an update was provided to the TPC.
- On Nov. 8, 2023, an update was provided to the Management Committee.
- On Oct. 31, 2023, a meeting of the TIP Subcommittee was held.
- On Sept. 20, 2023, a meeting of the TIP Subcommittee was held.
- In the previous fiscal year, there were multiple meetings and updates provided on the TIP development process, including to the Regional Council, Management Committee, Transportation Planning Committee, TIP Subcommittee and Transit Working Group.

FINANCIAL CONSIDERATIONS

None.

TECHNICAL, POLICY, LEGAL OR OTHER CONSIDERATIONS

PAG develops the TIP consistent with federal regulations for metropolitan transportation planning as described in 23 CFR §450.326.

ATTACHED ADDITIONAL BACKUP INFORMATION

- Draft RTA Roadway Element TIP project list
- Draft ADOT TIP project list (updated 1/12/2024)
- Draft Transit project list funded by FTA 5307, 5337, 5339 and STBG FlexChart of the RTA distribution of regional dollars, 2007 – 2029, by member agency.

Staff Contact/Phone	<p>Farhad Moghimi, (520) 792-1093, ext. 4420</p> <p>Dave Adler, (520) 792-1093, ext. 1443</p> <p>Jamie Brown, (520) 792-1093, ext. 4473</p> <p>Carolyn Laurie, (520) 792-1093, ext. 4461</p> <p>James Towe, (520) 792-1093, ext. 4471</p> <p>David Zynda, (520) 792-1093, ext. 4480</p> <p>Adam Ledford, (520) 792-1093, ext. 4434</p>
--------------------------------	--

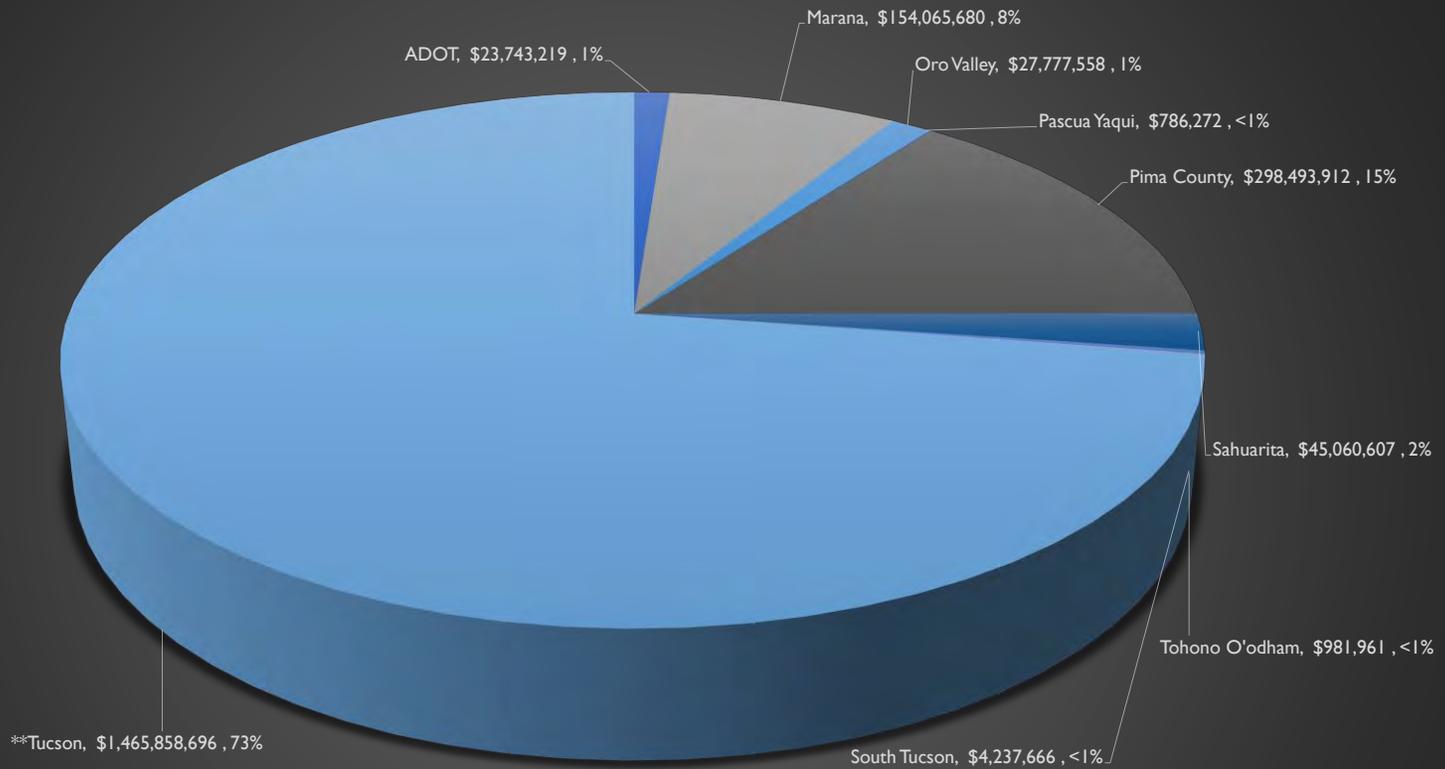
ROADWAY FUNDING THROUGH FY 2029

ALL DATA SUBJECT TO CHANGE.
TIP SUBCOMMITTEE FORMAL RECOMMENDATION ON DECEMBER 20, 2023

RTA ROADWAY PROJECTS
TRANSPORTATION IMPROVEMENT PROGRAM

I. ROADWAY ELEMENT	FY 2024 <small>(Includes Roll from FY 23)</small>	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	Sub Total (Includes Roll from FY '23 to FY '24)	Total (FY 24 through FY '29)	Revised Remaining Project Cost Estimate	*Ineligible Costs	Local Funds	Funding Need (minus ineligible costs)	Notes
01_a/01_b Tangerine Road													
86.06 ST021 Marana	RTA \$17,000,000	\$0	\$0	\$0	\$0	\$0	\$17,000,000	RTA	\$74,660,000	\$3,483,000	\$17,744,000	\$0	\$3,000,000 RTA augmentation in FY 24 (RTA Board action Dec 7, 2023)
	HURF 12R \$4,000,000	\$4,692,000	\$340,000	\$0	\$7,401,000	\$20,000,000	\$36,433,000	\$71,177,000	\$74,660,000	\$3,483,000	\$17,744,000	\$0	Local Funds: \$17,744,000 MAR in FY 26
	STBG \$0	\$0	\$17,744,000	\$0	\$0	\$0	\$17,744,000						
	Various: Local Funds \$0	\$0	\$17,744,000	\$0	\$0	\$0	\$17,744,000						
05_Silverbell Road													
56.06 SR6A Tucson	RTA \$8,471,000	\$0	\$0	\$0	\$0	\$0	\$8,477,000	RTA	\$49,752,000	\$2,883,000	\$3,545,000	\$0	Previously approved as project cost estimate with updated bid
	HURF 12R \$23,761,000	\$4,760,000	\$6,326,000	\$0	\$0	\$0	\$34,847,000	\$46,869,000	\$49,752,000	\$2,883,000	\$3,545,000	\$0	\$4 million of County impact fees removed from FY 26. Intended for Camino del Cerro to be segment.
	STBG \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0					FY 23-25 TUC, FY 26 in PCDFPO pledged to Camino del Cerro to be phase
	Various: Local Funds \$3,545,000	\$0	\$0	\$0	\$0	\$0	\$3,545,000						
13_1st Ave: Orange Grove to Ina													
82.06 4RTPR Pima County	RTA \$0	\$0	\$0	\$1,000,000	\$1,583,000	\$0	\$2,583,000	RTA	\$10,689,000	\$900,000	\$700,000	\$0	Project delayed
	HURF 12R \$0	\$0	\$0	\$0	\$6,506,000	\$0	\$6,506,000	FEDERALIZED	\$10,689,000	\$900,000	\$700,000	\$0	Balance amount of \$456,000
	STBG \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0					
	Various: Local Funds \$700,000	\$0	\$0	\$0	\$0	\$0	\$700,000						
14_1st Avenue: Grant to River													
81.06 SR11 Tucson	RTA \$11,000,000	\$33,400,000	\$19,348,000	\$0	\$0	\$0	\$63,748,000	RTA	\$135,600,000	\$6,780,000	\$2,802,000	\$61,949,000	Confirm local funds required for floodplain improvements.
	HURF 12R \$321,000	\$0	\$0	\$0	\$0	\$0	\$321,000	\$66,871,000	\$135,600,000	\$6,780,000	\$2,802,000	\$61,949,000	Local TUC impact fees in FY 23
	STBG \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0					
	Various: Local Funds \$2,802,000	\$0	\$0	\$0	\$0	\$0	\$2,802,000						
15 UPRR @ Grant Underpass													
84.06 SR16 Tucson	RTA \$5,588,000	\$0	\$0	\$0	\$0	\$0	\$5,642,000	RTA	\$27,199,000	\$1,360,000	\$3,000,000	\$0	
	HURF 12R \$8,589,000	\$7,838,000	\$0	\$0	\$0	\$0	\$16,427,000	\$25,069,000	\$27,199,000	\$1,360,000	\$3,000,000	\$0	
	STBG \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0					
	Various: HURF 2.6 \$3,000,000	\$0	\$0	\$0	\$0	\$0	\$3,000,000						
16_a Downtown Links													
81.04 S30N Tucson	RTA \$15,999,000	\$0	\$0	\$0	\$0	\$0	\$33,112,000	RTA	\$37,222,000			N/A	
	HURF 12R \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$110,000	\$37,222,000			N/A	
	STBG \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0					
	Various: Local Funds \$4,000,000	\$0	\$0	\$0	\$0	\$0	\$4,000,000						
18 Grant Road													
55.06 SR2A Tucson	RTA \$9,696,000	\$0	\$0	\$0	\$0	\$0	\$9,696,000	RTA	\$146,996,000	\$10,255,000	\$1,088,000	\$84,372,000	
	HURF 12R \$29,339,000	\$8,979,000	\$0	\$0	\$0	\$0	\$41,585,000	\$52,369,000	\$146,996,000	\$10,255,000	\$1,088,000	\$84,372,000	
	STBG \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0					
	Various: Local Funds \$1,088,000	\$0	\$0	\$0	\$0	\$0	\$1,088,000						Local FY 23 TUC impact fees
19_a 22nd Street													
131.00 SR5A Tucson	RTA \$44,422,000	\$0	\$0	\$0	\$0	\$0	\$44,422,000	RTA	\$181,200,000	\$1,600,000	\$38,711,000	\$0	City increased its FY 24 impact fee commitment from \$1.4 to \$4.5 million.
	HURF 12R \$7,773,000	\$879,000	\$1,940,000	\$3,081,000	\$15,069,000	\$2,318,000	\$31,060,000	\$179,600,000	\$181,200,000	\$1,600,000	\$38,711,000	\$0	\$498,885 unallocated with RAISE grant inclusion. Impact fee increase reduces unallocated to \$1,338,835
	STBG \$0	\$15,643,000	\$13,911,000	\$10,447,000	\$9,450,000	\$15,956,000	\$65,407,000	FEDERALIZED	\$181,200,000	\$1,600,000	\$38,711,000	\$0	\$25 million RAISE grant awarded
	Various: Local/Fed \$38,711,000	\$0	\$0	\$0	\$0	\$0	\$38,711,000						FY 23 PC Bonds, FY 24 TUC impact fees
													11.7 million expanded. Need to confirm sources.
20 Barraza Aviation Parkway													
87.06 ADOT	RTA \$0	\$0	\$0	\$0	\$0	\$0	\$0	RTA	\$19,600,000			N/A	\$4.26 million of HURF 2.6 included in FY 2026
	HURF 12R \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	FEDERALIZED				Fixed amount per the RTA ballot
	STBG \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0					FY 26, \$564,000 of STMatch for the STBG and \$388,000 of ASTBG for design
	Various: Local/HURF 2.6/Fed Funds \$0	\$0	\$19,600,000	\$0	\$0	\$0	\$19,600,000						Balance of \$19,600,000 unallocated with STBG and HURF
22 Irvington Road: West of I-19													
38.13/77.06 ADOT	RTA \$0	\$0	\$0	\$0	\$0	\$0	\$0	RTA	\$94,788,000			N/A	Fixed amount per the RTA ballot
	HURF 12R \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$9,800,000	\$94,788,000			N/A	
	STBG \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0					
	Various: Local Funds/ASTP/STMatch \$84,400,000	\$0	\$0	\$0	\$0	\$0	\$84,400,000						Local/ASTP/STMatch: FY 23 is STMatch, FY 24 is ASTP
23 Valencia Road: I-19 to Alvernon													
60.06 Tucson	RTA \$0	\$0	\$1,740,000	\$499,000	\$0	\$0	\$2,239,000	RTA	\$9,793,000			N/A	Fixed amount per the RTA ballot
	HURF 12R \$0	\$0	\$2,045,000	\$5,509,000	\$0	\$0	\$7,554,000	FEDERALIZED	\$9,793,000			N/A	
	STBG \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0					
	Various: Local Funds \$0	\$0	\$0	\$0	\$0	\$0	\$0						
25 Valencia Kolb - Houghton A - B													
32.16/59.06 SR13-2/SR14 Tucson	RTA \$29,711,000	\$5,200,000	\$0	\$0	\$0	\$0	\$38,615,000	RTA	\$46,762,000	\$565,000	\$7,582,000	\$0	\$209,000 provided from TIP 32.16 to TIP 32.14
	HURF 12R \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$46,197,000	\$565,000	\$7,582,000	\$0	FY 23 TUC of \$1,012,000 and \$4,000,000 of PCDFPO, FY 24 & FY 25 TUC
	STBG \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0					\$19,422,000 of RTA augmentation in FY 24 (RTA Board action on Dec 7, 2023)
	Various: Local Funds/PCDFPO \$6,082,000	\$1,500,000	\$0	\$0	\$0	\$0	\$7,582,000						
30 22nd St.: Camino Seco to Houghton													
32.00 Tucson	RTA \$700,000	\$531,000	\$0	\$0	\$0	\$0	\$1,231,000	RTA	\$35,912,000	\$1,796,000	\$3,000,000	\$0	
	HURF 12R \$875,000	\$644,000	\$11,115,000	\$17,251,000	\$0	\$0	\$29,885,000	\$34,116,000	\$35,912,000	\$1,796,000	\$3,000,000	\$0	
	STBG \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0					
	Various: Local Funds \$1,000,000	\$1,000,000	\$1,000,000	\$0	\$0	\$0	\$3,000,000						Local Funds: TUC impact fees
31 Harrison: 2-Lane Bridge													
38.00 Tucson	RTA \$989,000	\$0	\$0	\$0	\$0	\$0	\$989,000	RTA	\$14,250,000	\$750,000	\$0	\$0	
	HURF 12R \$0	\$1,169,000	\$12,092,000	\$0	\$0	\$0	\$13,261,000	\$14,250,000	\$14,250,000	\$750,000	\$0	\$0	
	STBG \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0					
	Various: Local Funds \$0	\$0	\$0	\$0	\$0	\$0	\$0						
32 Houghton													
16.15/23.20 SR13/NA Tucson	RTA \$20,600,000	\$0	\$0	\$0	\$0	\$0	\$20,600,000	RTA	\$76,879,000	\$10,331,000	\$11,488,000	\$0	Confirm local funds required for the scope expansion from 4 to 6 lanes.
	HURF 12R \$9,961,000	\$0	\$0	\$8,000,000	\$6,461,000	\$9,691,000	\$34,152,000	\$66,548,000	\$76,879,000	\$10,331,000	\$11,488,000	\$0	Local FY 23 in PCDFPO & TUC TIP 23.20, FY 24 in PCDFPO, TIP 24, 14.15/23.20
	STBG \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0					
	Various: Local Funds \$5,506,000	\$0	\$5,982,000	\$0	\$0	\$0	\$11,488,000						
I-10: Country Club Rd & Kino Interchange													
9.23 ADOT	RTA \$0	\$0	\$0	\$0	\$0	\$0	\$0	RTA	\$0			N/A	
	HURF 12R \$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0			N/A	
	STBG \$15,337,000	\$0	\$0	\$0	\$0	\$0	\$15,337,000	\$15,337,000	\$0				
	Various: Local Funds \$0	\$0	\$0	\$0	\$0	\$0	\$0						
*ADOT HURF 12.6 FORECAST (ROADWAY)													
	\$27,047,000	\$28,069,000	\$28,933,000	\$29,787,000	\$30,622,000	\$31,474,000	HURF forecast does not reflect 2022-2026 TIP. *Reflects HURF Roadway apportionment only.					\$146,321,000	Total Funding Need Across 10 Roadway Projects
	\$52,594,000											\$5,949,000	Remaining Unprogrammed HURF (Contingency)
	\$16,910,000												
STBG CONTRIBUTION													
	\$15,337,000	\$15,643,000	\$15,956,000	\$15,956,000	\$15,956,000	\$15,956,000							STBG forecast does not reflect 2022-2026 TIP.
	\$43,957,000	\$11,932,000	\$11,040,000	\$6,420,000	\$6,376,000	\$6,484,000							
	\$11,932,000	\$11,040,000	\$6,420,000	\$6,376,000	\$6,484,000	\$5,949,000							
	\$0	\$0	\$0	\$0	\$0	\$0							
	\$0	\$0	\$0	\$0	\$0	\$0							
	\$11,932,000	\$11,040,000	\$6,420,000	\$6,376,000	\$6,484,000	\$5,949,000							
TOTAL BALANCE SUPPLANTED SOURCES													
	\$11,932,000	\$11,040,000	\$6,420,000	\$6,376,000	\$6,484,000	\$5,949,000							
TOTAL RTA REVENUE PROGRAMMED													
	\$164,185,000	\$39,131,000	\$19,348,000	\$0	\$0	\$0						\$246,452,000	
TOTAL HURF 12.6 PROGRAMMED													
	\$84,619,000	\$28,961,000	\$33,553,000	\$29,831,000	\$30,514,000	\$32,009,000						\$242,903,000	
HURF 12.6 PROGRAMMING MINUS ROLL													
	\$32,025,000												
TOTAL HURF 2.6 PROGRAMMED (VARIOUS)													
			\$7,263,000										
TOTAL STBG PROGRAMMED													
	\$15,337,000	\$15,643,000	\$15,956,000	\$15,956,000	\$15,956,000	\$15,956,000						\$104,604,000	
TOTAL 'VARIOUS' FUNDS PROGRAMMED													
	\$147,134,000	\$2,500,000	\$48,026,000	\$0	\$0	\$0						\$198,248,000	
TOTAL REGIONAL FUNDS PROGRAMMED													
	\$99,956,000	\$44,604,000	\$49,509,000	\$45,787,000	\$46,470,000	\$47,965,000						\$347,507,000	
TOTAL													

***REGIONAL TRANSPORTATION AUTHORITY DISTRIBUTION OF REGIONAL DOLLARS 2007-2029**



Fund sources include RTA excise tax, HURF 12.6, HURF 12R, HURF 2.6 and STP/STBG. Preliminary 25-29 TIP projection used for future expenditures; recieved formal recommendation from TIP Subcommittee, December 20, 2023.

*RTA sponsored projects totaling \$401.6 million are not included in this chart. RTA sponsored projects are Ballots 38 (Bus Pullouts); 40 (Signal Technology); 41 (Greenways & Pathways); 42 (Wildlife Linkages); 43 (Small Business Assistance); 46 (Frequency and Area Expansion); 47 (Special Needs for Elderly and Disabled); 48 (Neighborhood Circulators); 99 (Operations) and debt service requirements.

**Includes 'Tucson Transit' total of \$262.3 million.



Communication #3791

SUBJECT: Regional Mobility and Accessibility Plan (RMAP) Development Update

Meeting	Meeting Date	Agenda Category	Agenda Item #
Regional Council	January 25, 2024	Information	12

REQUESTED ACTION/SUGGESTED MOTION

This is an information item.

ASSOCIATED OWP WORK ELEMENT/GOAL

Work Element 40, Transportation Planning

SUMMARY

PAG is in the process of developing the 2055 RMAP, and staff will give an update on the status of the development process for the new long-range transportation plan. A long-range plan is federally required for the Tucson metropolitan area. The last update was adopted by the PAG Regional Council in September 2020. PAG staff also will provide updates on the following items:

- RMAP Working Group update
- Project list update
- Performance measures update
- Modeling update

PRIOR BOARD AND/OR COMMITTEE ACTION

None.

FINANCIAL CONSIDERATIONS

The 2055 RMAP is a fiscally constrained long-range transportation plan.

TECHNICAL, POLICY, LEGAL OR OTHER CONSIDERATIONS

Transportation projects to be delivered in the region must be shown to be consistent with PAG's adopted RMAP to be eligible to receive federal funding for regional projects.

ATTACHED ADDITIONAL BACKUP INFORMATION

None.

Staff Contact/Phone	
	Farhad Moghimi, (520) 792-1093, ext. 4420 Hannah Oden, (520) 792-1093, ext. 1418 Jeanette DeRenne, (520) 792-1093, ext. 1477 Dave Atler, (520) 792-1093, ext. 1443

Communication #3792

SUBJECT: Regional Transportation Revenues Update

Meeting	Meeting Date	Agenda Category	Agenda Item #
Regional Council	January 25, 2024	Information	13

REQUESTED ACTION/SUGGESTED MOTION

This is an information item.

ASSOCIATED OWP WORK ELEMENT/GOAL

Work Element 40, Transportation Planning

SUMMARY

Staff will be available to report on the information in the attached Regional Transportation Revenues Report.

PRIOR BOARD AND/OR COMMITTEE ACTION

This is a regularly occurring agenda item.

FINANCIAL CONSIDERATIONS

None.

TECHNICAL, POLICY, LEGAL OR OTHER CONSIDERATIONS

- PAG tracks the state gas tax revenue portion of Local HURF (sometimes called Direct HURF) and the Vehicle License Tax (VLT). This is used to report to our member jurisdictions, on a regionwide level, to compare with actual distributions.
- In addition to HURF allocations, the region receives federal funding through the Surface Transportation Block Grant Program (STBG). These funds are apportioned on an annual basis, and the amount is set by federal law in the most recent transportation authorization bill.

- In addition to regional HURF and STBG, ADOT funds spent in the greater Tucson region consist of both HURF and federal funds and are referred to as “ASTBG” funds in the PAG Transportation Improvement Program. PAG works cooperatively with ADOT to program 13% of ASTBG funds on projects in the greater Tucson planning area.

ATTACHED ADDITIONAL BACKUP INFORMATION

Regional Transportation Revenues Report.

Staff Contact/Phone	<p>Farhad Moghimi, (520) 792-1093, ext. 4420</p> <p>Dave Adler, (520) 792-1093, ext. 4443</p> <p>Jamie Brown, (520) 792-1093, ext. 4473</p> <p>Carolyn Laurie, (520) 792-1093, ext. 4461</p> <p>James Towe, (520) 792-1093, ext. 4471</p> <p>David Zynda, (520) 792-1093, ext. 4480</p>
--------------------------------	---



Regional Council

Jan. 25, 2024 (information last updated on Dec. 4, 2023)

Regional Transportation Revenues Report

This report showcases regional funding for roadway projects administered by Pima Association of Governments including Surface Transportation Block Grant (SBTG) Program funding, Highway User Revenue Funding (HURF) 12.6% and 2.6%, and Regional Transportation Authority (RTA) Excise Tax Revenues. Furthermore, HURF provided to local jurisdictions is also shown as a courtesy.

STBG funding is suballocated to urban areas based on population. PAG’s largest source of STBG funding is known as “STBG > 200k” or STBG suballocated to urban areas with population exceeding 200,000 which includes portions of each of the following: the City of Tucson, the City of South Tucson, the Town of Marana, the Town of Oro Valley, portions of unincorporated Pima County, the San Xavier District of the Tohono O’odham Nation, and the Pascua Yaqui Pueblo. Apportionments for STBG > 200k are shown below.

Summary

Table 1: FY 2024 Actuals and STBG >200k Federal Apportionments

<u>Regional HURF 12.6% Actual Revenue (through October)</u>	<u>Regional HURF 2.6% Actual Year- to-date Revenue (through October)</u>	<u>RTA Actual Revenue (through November)</u>	<u>STBG > 200,000¹</u>
\$10,147,489	\$2,239,579	\$ 50,640,802	\$15,337,000

¹ Only STBG > 200 is shown and not STBG suballocated to urban areas with lower population thresholds. STBG > 200 constitutes approximately 75% of STBG funding and is the only federal funding source eligible for most roadway projects in the PAG planning area. Furthermore, it is the only federal funding source that can be used for remaining RTA Element 1 Roadway Projects.



Table 2: FY 2024 Projected Revenues per the FY 2022-FY 2026 TIP (Adopted May 2021)

Projected Regional HURF 12.6% Projected Revenue	Regional HURF 2.6% Projected Revenue	RTA Projected Revenue	Projected Federal Obligation Authority
\$23,000,000	\$5,000,000	\$119,070,000	\$21,500,000

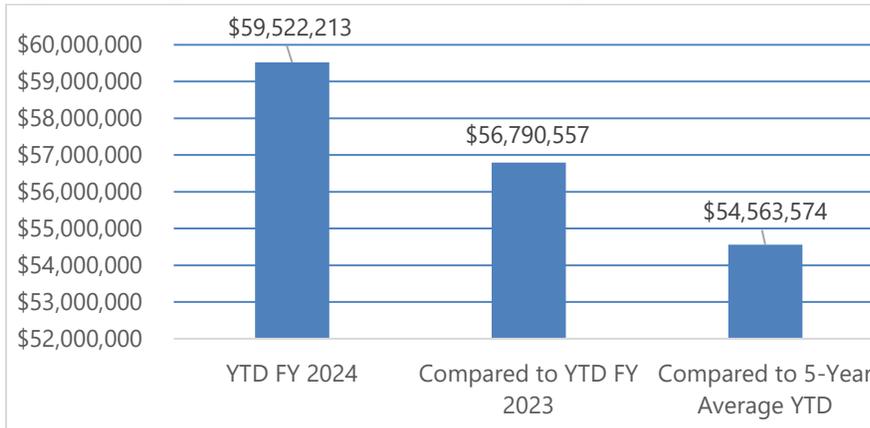
Regional Highway User Revenue Funds (HURF)

Table 3: HURF Distributions in the PAG Planning Area: July 2023 - October 2023

	YTD FY 2024	Compared to YTD FY 2023	Compared to 5-year Average
Regional Total	\$ 59,522,213	4.81%	9.09%

Source: ADOT HURF Monthly Distribution Report and ADOT Monthly Receipts and Expenditures Report, and ADOT VLT County HURF Breakdown

Figure 1: Regionwide HURF Revenues: July 2023 - October 2023



Source: ADOT HURF Monthly Distribution Report and ADOT Monthly Receipts and Expenditures Report



Table 4: HURF 12.6% Report

Month	FY 24 Actual	FY 24 Projected*	Comparison FY 24 Actual to Projected	FY 23 Actuals	Comparison FY 24 to FY 23
July	2,728,060	2,510,560	8.66%	2,645,880	3.11%
August	2,454,871	2,075,919	18.25%	2,187,812	12.21%
September	2,405,185	1,997,003	20.44%	2,104,642	14.28%
October	2,559,374	2,217,212	15.43%	2,336,721	9.53%
November	-	2,182,641		2,300,286	
December	-	2,105,966		2,219,478	
January	-	2,513,803		2,649,298	
February	-	2,288,264		2,411,602	
March	-	2,208,072		2,327,088	
April	-	2,310,748		2,435,298	
May	-	2,661,686		2,805,152	
June	-	2,413,127		2,543,195	
SUBTOTAL (YTD)	10,147,489	8,800,694	15.30%	9,275,055	9.41%
TOTAL		27,485,000		28,966,452	

Source: ADOT Monthly Receipts and Expenditures Report (actuals) and ADOT Arizona Highway Users Revenue Fund Forecasting Process & Results FYs 2024-2033 – MAG and PAG HURF Distribution received November 2023.

*Projected values – Annual projection divided by PAG staff to generate monthly estimates. For a given month, divide the prior fiscal year actual by the prior fiscal year total and multiply that ratio to the current fiscal year projection.

Exact values from official ADOT reports are rounded to the nearest dollar.



Table 5: HURF 2.6% Report

Month	<u>FY 24</u> <u>Actual</u>	<u>FY 24</u> <u>Projected*</u>	<u>Compariso</u> <u>n FY 24</u> <u>Actual to</u> <u>Projected</u>	<u>FY 23</u> <u>Actuals</u>	<u>Compariso</u> <u>n FY 24 to</u> <u>FY 23</u>
July	562,933	479,058	17.51%	545,975	3.11%
August	557,359	411,328	35.50%	468,784	18.89%
September	544,445	401,601	35.57%	457,699	18.95%
October	574,841	446,933	28.62%	509,363	12.85%
November		449,099		511,832	
December		436,322		497,270	
January		517,812		590,143	
February		479,154		546,085	
March		460,974		525,365	
April		485,347		553,143	
May		551,742		628,812	
June		552,632		629,825	
SUBTOTAL (YTD)	2,239,579	1,738,919	28.79%	1,981,821	13.01%
TOTAL		5,672,001		6,464,296	

Source: ADOT Monthly Receipts and Expenditures Report (actuals) and ADOT Arizona Highway Users Revenue Fund Forecasting Process & Results FYs 2024-2033 – MAG and PAG HURF Distribution received November 2023.

Note: HURF 2.6% is limited to projects on the state system (TIP Policies and Procedures PO10.0)

*Projected values – Annual projection divided by PAG staff to generate monthly estimates. For a given month, divide the prior fiscal year actual by the prior fiscal year total and multiply that ratio to the current fiscal year projection.

Exact values from official ADOT reports are rounded to the nearest dollar.



Table 6: HURF 12.6% Balances²

PAG HURF 12.6% Start of Month Balance (\$)	
October 2022	50,638,099
November 2022	52,938,386
December 2022	54,880,562
January 2023	57,529,859
February 2023	59,873,516
March 2023	61,968,417
April 2023	64,401,836
May 2023	66,964,439
June 2023	69,503,499
July 2023	72,231,558
August 2023	74,686,430
September 2023	77,077,778
October 2023	79,632,785
Year-over-year	49.36%

Source: ADOT Monthly Receipts and Expenditures Report

² For up-to-date information regarding projects this HURF balance is programmed to, please refer to the TIP website: [PAG TIP Home \(pagregion.com\)](http://pagregion.com)



Table 7: FY 2024 City and Town HURF Distributions

Jurisdiction Month	Marana FY 2024	Oro Valley FY 2024	Sahuarita FY 2024	South Tucson FY 2024	Tucson FY 2024	City/Town Total FY 2024
July	373,189	338,485	245,444	33,259	4,767,246	5,757,624
August	353,129	320,270	232,243	31,470	4,530,317	5,467,429
September	382,364	346,802	251,474	34,080	4,896,582	5,911,302
October	361,852	328,189	237,984	32,246	4,627,057	5,587,327
November						
December						
January						
February						
March						
April						
May						
June						
TOTAL	1,470,534	1,333,745	967,145	131,056	18,821,202	22,723,682
Actual YTD (24 / 23)	-1.05%	3.63%	1.12%	5.39%	4.34%	3.79%
Actual YTD (24 / 22)	6.23%	2.62%	8.99%	-18.88%	-0.05%	0.71%
Actual YTD (24 / 21)	12.65%	8.82%	15.58%	-13.98%	5.84%	6.67%
Actual YTD (24 / 20)	20.89%	13.52%	23.47%	-11.11%	9.63%	10.91%
Actual YTD (24 / 19)	25.37%	14.85%	25.96%	-11.12%	10.57%	12.10%
Actual YTD (24 / 5 year avg)	11.99%	8.46%	14.27%	-10.62%	5.92%	6.66%

Source: ADOT HURF Monthly Distribution Report and ADOT Monthly Receipts and Expenditures Report



Table 8: FY 2024 PAG and Pima County HURF and VLT

Funding Source	12.6% Funds	2.6% Funds	Pima County (HURF)	Pima County (VLT)	Regional Totals
Month	FY 2024	FY 2024	FY 2024	FY 2024	FY 2024
July	2,728,060	562,933	4,603,410	1,472,932	15,124,959
August	2,454,871	557,359	4,370,695	1,691,247	14,541,601
September	2,405,185	544,445	4,733,670	1,453,316	15,047,917
October	2,559,374	574,841	4,474,997	1,611,197	14,807,736
November					
December					
January					
February					
March					
April					
May					
June					
TOTAL	10,147,489	2,239,579	18,182,771	6,228,691	59,522,213
Actual YTD (24 / 23)	9.41%	13.01%	3.75%	1.87%	4.81%
Actual YTD (24 / 22)	13.35%	20.87%	-0.06%	7.45%	3.77%
Actual YTD (24 / 21)	26.04%	33.05%	5.76%	-5.01%	8.64%
Actual YTD (24 / 20)	21.92%	24.44%	10.86%	11.02%	13.11%
Actual YTD (24 / 19)	33.17%	33.56%	12.13%	13.80%	16.12%
Actual YTD (24/ 5 yr avg)	20.17%	24.50%	6.30%	5.38%	9.09%

Source: ADOT HURF Monthly Distribution Report, ADOT Monthly Receipts and Expenditures Report, and ADOT VLT County HURF Breakdown
 Regional Totals show the City and Town total from Table 7 plus HURF 12.6%, 2.6%, Pima County HURF and Pima County VLT



Table 9: Historical HURF and VLT to PAG Member Jurisdictions

FY	Marana	Oro Valley	Sahuarita	South Tucson	Tucson	Pima County HURF	Pima County VLT
2019	3,607,631	3,563,828	2,358,072	452,043	52,174,997	49,718,364	15,794,698
2020	3,825,665	3,694,044	2,533,133	636,247	51,193,213	48,759,035	15,924,260
2021	3,956,482	3,714,572	2,536,068	461,760	53,882,908	52,117,771	18,516,781
2022	4,271,391	3,979,751	2,739,084	483,467	57,442,486	55,522,085	18,196,496
2023	4,718,392	4,129,268	3,042,600	397,208	57,509,226	55,834,011	18,867,362
Total	20,379,561	19,081,463	13,208,957	2,430,725	272,202,830	261,951,266	87,299,596

Source: ADOT HURF Monthly Distribution Report and ADOT VLT County HURF Breakdown

Table 10: Gasoline Sales: July-September FYs 2020-24

	Gallons YTD	Percent of Statewide
Pima County Sales FY 2024	129,080,379	12.84%
Pima County Sales FY 2023	126,615,481	12.90%
Pima County Sales FY 2022	133,548,899	13.14%
Pima County Sales FY 2021	117,286,388	12.95%
Pima County Sales FY 2020	134,719,400	13.35%
Pima County Sales 5-Year Average	129,069,395	13.18%

Source: ADOT HURF Monthly Distribution Report



Table 11: RTA Revenue Budget and Actuals³

RTA Revenues (\$)					
Month	FY 24 Actual	FY 24 Adopted	Comparison FY 24 Actual to Adopted	FY 23 Actual	Comparison FY 24 to FY 23
July	9,961,459	9,631,532	3.43%	9,621,307	3.54%
August	10,017,256	9,856,876	1.63%	9,846,411	1.74%
September	10,291,109	9,404,507	9.43%	9,394,523	9.54%
October	10,187,212	9,528,182	6.92%	9,518,066	7.03%
November	10,183,766	9,774,463	4.19%	9,764,086	4.30%
December		9,630,283		9,620,059	
January		9,744,049		9,733,704	
February		11,931,229		11,918,562	
March		9,087,256		9,077,608	
April		9,579,469		9,569,299	
May		10,612,561		10,601,294	
June		10,289,594		10,278,670	
Subtotal (YTD)	50,640,802	48,195,560	5.07%	48,144,393	5.19%
Total		119,070,000		118,943,589	

Source: Arizona Department of Revenue

³ Note: Actual values lag by two months. For example, an actual shown in September reflects taxes collected on taxable goods in July. These taxes in July were deposited into Arizona Department of Revenue accounts in August. They arrive in RTA accounts by September.

Communication #3793

SUBJECT: Carbon Reduction Strategies Update

Meeting	Meeting Date	Agenda Category	Agenda Item #
Regional Council	January 25, 2024	Information	14

REQUESTED ACTION/SUGGESTED MOTION

This is an information item.

ASSOCIATED OWP WORK ELEMENT/GOAL

Work Element, 40, Transportation Activities

SUMMARY

Updates are included in the attachment.

PRIOR BOARD AND/OR COMMITTEE ACTION

FY 2024 and FY 2025 PAG OWP Approval, May 25, 2023.

FINANCIAL CONSIDERATIONS

None.

TECHNICAL, POLICY, LEGAL OR OTHER CONSIDERATIONS

As requested at the previous Regional Council meeting, this is another comprehensive update on the status of the federal Carbon Reduction Program (CRP) funds allocation process and the associated emissions reduction strategies within the jurisdiction of Pima Association of Governments (PAG).

The federal CRP funds are distributed to states and metropolitan planning organizations (MPOs) in accordance with federal law. MPOs, required either by federal law or state designation, are entrusted with the role of air quality planning agencies and the implementation of control measures, such as PAG's Travel Reduction Program.

The PAG Regional Council has officially approved carbon reduction strategies, alongside the allocation of resources for their effective implementation, as outlined in

previous memos on this topic (see attached). Subsequently, the state has granted approval of the strategies devised by all MPOs, inclusive of PAG's carbon reduction strategies. In collaboration with the MPOs, the state submitted the Statewide Carbon Reduction Strategies to the Federal Highway Administration (FHWA), in accordance with the Infrastructure Investment and Jobs Act (IIJA) by the deadline of Nov. 15, 2023.

Strategies adopted by MPOs may vary. This reflects their unique transportation planning goals, objectives, and current air quality conformity status. Similarly, the strategies implemented at the state level may also exhibit distinctive characteristics, tailored to the specific needs and priorities of each state.

PAG's strategies, having received approval from the Arizona Department of Transportation (ADOT) and FHWA, have the necessary authorization for implementation. Additionally, the FHWA recently issued additional rules, mandating ADOT to establish emissions reduction targets by Feb. 1, 2024, followed by each MPO within 180 days thereafter.

These emissions reduction targets will be seamlessly integrated into the long-range regional transportation plan of all MPOs, with a plan mandatory update every four years. PAG's committees, functioning as technical advisory bodies, will actively participate in the formulation of emissions reduction targets and other aspects of the Regional Mobility and Accessibility Plan (RMAP), akin to the region's safety targets outlined in the RMAP.

PAG's adopted strategies, already sanctioned by the state and FHWA, are slated for integration into the region's long-range planning efforts. Consequently, emissions reduction targets are scheduled for establishment by PAG, serving as the federally certified MPO and state-designated Air Quality Planning Agency, by July 2024.

Following the establishment of these targets, progress toward their achievement will be systematically monitored and reported on an annual basis. Both the emissions reduction targets and performance measures will be integral components of the 2055 RMAP, necessitating periodic updates by PAG every four years, as mandated.

It is essential to underscore that adherence to the adopted RMAP is statutorily mandated, particularly concerning the utilization of all federal funds, including set-aside funds such as the CRP funds. This commitment aligns with the statutory and fiduciary obligations of the MPO.

ATTACHED ADDITIONAL BACKUP INFORMATION

- Carbon Reduction Strategies Timeline
- Memo dated Nov. 22, 2023, providing CRP OWP status update.
- Memo dated Oct. 4, 2023, providing CRP question responses.
- Memo dated Sept. 26, 2023, providing CRP Implementation Update.

Staff Contact/Phone

Farhad Moghimi, (520) 792-1093, ext. 4420
Dave Atler, (520) 495-1443
Dustin Fitzpatrick, (520) 495-1417



Carbon Reduction Strategies Timeline

- **April 2023** – ADOT consults with PAG on the development of carbon reduction strategies and FHWA’s requirement for each state to establish a Greenhouse Gas (GHG) performance measure for declining targets for reducing tailpipe CO₂ emissions on the National Highway System.
- **April/May 2023** – PAG requests comments from PAG members on proposed carbon reduction strategies outlined in the OWP; one comment and response provided.
- **May 2023** – Regional Council adopts OWP and budget, which includes recommended carbon reduction strategies in anticipation of alignment with ADOT’s draft plan. PAG’s strategies were approved by the Regional Council, based on the federal carbon reduction program (CRP)-eligible activities approved by ADOT and FHWA. They are shown in the OWP under work element 40 outlining goal numbers 20-30. Seventeen projected outcomes of the programs are aligned with CRP activities which include nine planning efforts supported by consulting services.
- **October 2023** – ADOT releases a draft carbon reduction strategy and requests comments from MPOs.
- **November 2023** – PAG distributes ADOT’s draft strategy to member agencies and submits comments recommending the addition of eight projected outcomes of programs aligned with PAG’s CRP activities on top of the nine outcomes listed in the adopted OWP.
- **November 2023** – ADOT submits its final carbon reduction strategy to FHWA and will be required to update the document every four years.
- **December 2023** – FHWA issues final rule that establishes a GHG performance measure for state DOTs and MPOs. The measure is part of the National Highway Performance Program and assesses the change in CO₂ emissions on the NHS relative to 2022 levels.
- **February 2024** – ADOT is required to submit its 4-year target to FHWA no later than Feb. 1.
- **July 2024** – PAG is required to submit its 4-year target and metric calculation method to ADOT (within 180 days of ADOT’s target submitted to FHWA).
 - PAG has budgeted for the following services to support carbon reduction efforts in FY 24 and FY 25 pursuant to PAG’s contract with ADOT.

- Multimodal Performance Assessment – Contract with University of Arizona
- Vanpool Subsidies – Contract with Enterprise
- Traffic Count Program – Contract with All Traffic Data Services
- Active Transportation Plan – Contract with Kimley-Horn
- Household Travel Study and Assessment – Contract Solicitation in Process
- ABM Exploratory Planning Tool – Contract with WSP
- Orthophotography Multimodal Feature Data Extraction – Contract Solicitation in Process
- DTA Model - Contract with Caliper
- Microtransit – Contract Solicitation in Process
- **Committee process** – Air Quality Subcommittee, TPC, EPAC, Management – will review planning efforts and recommendations for carbon reduction integration; and review of initial GHG performance measure 4-year reduction target.
- **Regional Council** – Council will review recommendations; approve GHG reduction target.
- **Recommendations**
 - Recommended target will be supported by implementation of carbon reduction strategies via existing or new regional plans (ex. 2045 RMAP or 2055 RMAP).
 - Individual plans to inform the RMAP will move through the typical committee process.
 - Public input will be considered during the development of each plan, and ultimately the RMAP is required to incorporate the adopted carbon reduction strategies.
- **October 2026** – ADOT is required to submit its Full Performance Period Progress Report to FHWA by Oct. 1, 2026.
- **February 2026** – PAG is required to submit Second Performance Period 4-year target to ADOT within 180 days of ADOT’s target submittal; RMAP to include GHG PM and progress toward achievement of target.

MEMO

Date: November 22, 2023

To: Farhad Moghimi

Copy: Dave Adler, Roy Cuaron

From: Dustin Fitzpatrick

Re: Carbon Reduction Program – OWP Consulting Services Status Update

PAG's adopted FY 2024 and FY 2025 Overall Work Program (OWP) outlines planning activities funded through the new Carbon Reduction Program (CRP) under the IIJA. Today, FHWA finalized the Greenhouse Gas (GHG) Performance Measure, applicable to State DOTs and MPOs. CRP projects will support PAG's efforts toward meeting reduction targets for on-road mobile source GHG emissions.

The CRP planning activities are detailed under Work Element 40 – Transportation Activities, and seamlessly align with ADOT's Carbon Reduction Strategy to help reduce transportation carbon emissions in our region. The OWP Revenue and Expenditure Tables detail nine CRP-related projects that are supported by consulting services. Below is a summary of the timeline and status of the projects.

Vanpool Subsidies – Contract with Enterprise

- Providing valuable subsidies to support increased participation in the vanpool commuter assistance/rideshare program enables transportation carbon reduction through increased vehicle occupancy rates and corresponding decreased single occupancy vehicle rates.

Traffic Count Program - Contract with All Traffic Data Services

- Enhances the Safe System approach with volume, classification, and pedestrian data; assists in identifying heavily travelled corridors, assisting in route planning for transit; contributes to estimates of automobile dependence and utilization for equity analysis; validates model results for TBM, ABM, DTA and MOVES; contributes to transportation needs analyses and evaluation of long-term statistics using historical data.

Active Transportation Plan - Consultant selection in process.

- A critical step to reduce carbon emissions and improve air quality in the PAG region by planning for alternative transportation options. Anticipated carbon reduction benefits will be data-driven and will utilize PAG's Activity Based Model. Example benefits include, but are not limited to, the number of car trips replaced by an active mode, the amount of carbon reductions expected, and the anticipated improvement to air quality from an environmental and public health perspective.

Household Travel Study and Assessment - Consultant selection in process.

- Updating the existing travel patterns and incorporating the newly transformed post-COVID travel behaviors, the household travel study and assessment focuses on collecting post-COVID travel behavior patterns to understand how regional travel behavior has evolved, the affect to air quality, and to improve PAG transportation planning models with the collected travel behaviors. The study will highlight changes in travel modes compared to the previous survey results and incorporate preferences for sustainable transportation options to develop a strategic transportation plan for promoting modal shift toward reduced transportation emissions.

Microtransit - Consultant selection in process.

- Aims to identify and introduce new microtransit zones to improve transportation accessibility, enhance public transit services, and address the changing mobility needs of the community. Enables reduction of transportation emissions through increased transit utilization.

ABM Exploratory Planning Tool - Contract amendment in process.

- A travel demand model improvement that takes into account the uncertain future transportation environment as well as supporting air quality analysis, the ABM exploratory tool development would highlight the strategic approach to demonstrate the impact of regional travel behavior changes and track impacts on air quality.

Multimodal Performance Assessment - UA Contract

- This project will first collect and identify existing regional multi-modal data and local sensor data for the regional non-auto multi-modal transportation system. These data sources will be explored to identify all potential performance measures related to regional air quality and travel behavior. As a final output, this project will develop the methods of data collection and multi-modal performance measure estimation as well as QA/QC procedures.

DTA Model – Consultant selection in process.

- To further support air quality analyses, including the EPA MOVES model, this project focuses on the calibration and validation of the current regional DTA model, guides the development of the overall DTA model application procedure, develops outputs to improve the existing MOVES model, improves estimates for the EPA's National Emissions Inventory, and conducts an exploration of congestion mitigation measures around specific congested areas, such as K-12 schools, to improve travel demand modeling.

Ortho Data Extraction – Consultant selection in process.

- The newly added data combined with overlay analysis will help PAG assess urban infrastructure gaps. We will be able to pair infrastructure gaps with transportation needs for data-driven goal setting and performance tracking. This will support planning, priorities, and implementation of multi-modal infrastructure. Additionally, it will be used for safety assessments, which enable further improvements to biking and pedestrian facilities. Safety improvements are key to encouraging residents to choose transportation alternatives. As a result, we will encourage carbon reductions and demonstrate infrastructure trends numerically.

Date October 4, 2023

To: PAG Regional Council Members

From: Farhad Moghimi, Executive Director 

Re: Response to Questions on Carbon Reduction Program Implementation

In response to the request made during the Sept. 28 Regional Council meeting, please see additional program details, mirroring the order of inquiries outlined in Mayor Romero's letter dated Sept. 22, 2023, regarding Pima Association of Governments' adopted Carbon Reduction Program (CRP) strategies.

Planning and Public Input Efforts

Strategies involving planning, such as the development of a new Regional Active Transportation Plan, will precisely adhere to PAG's standards for committee involvement and public input throughout their development phases. Furthermore, such plans will play a pivotal role in shaping future long-range regional plans, which will undergo extensive and inclusive public input processes.

IIJA Federal Regulations Compliance

Committed to complying with the new IIJA federal regulations, our dedicated PAG staff has been carefully coordinating efforts with both FHWA and ADOT staff. This collaboration aims to not only support state strategies but also ensures that PAG's planning and modeling efforts seamlessly align with the overarching goals of the Carbon Reduction Program. Additionally, our staff has been diligently formulating comprehensive scopes of work and preparing the requisite procurement documents essential for the successful implementation of each adopted strategy.

CRP Budget Allocation

The plan for spending CRP funds is aligned with the strategies outlined in the adopted Overall Work Plan (OWP). CRP funding is incorporated into our overall transportation planning activities and related staffing. To date, \$400,000 has been reimbursed on eligible staff hours allocated to different elements of the CRP development, coordination and foundational implementation of the adopted strategies. One example of a future strategy is a Household Travel Survey, which is anticipated to bring critical data to our regional modeling capabilities for addressing carbon reduction in our long-range planning efforts. Additionally, the table below lists the budgeted amounts for the CRP-eligible projects and adopted strategies in the OWP.

CRP-eligible projects and strategies in Table 6 of the adopted PAG OWP

Fiscal Year	CRP Projects and Strategies	Budgeted Amount (\$)
2024	Vanpool subsidies	150,000
2024	Regional Active Transportation Plan	598,037
2024	Exploratory planning tool development for uncertain future transportation system and environment	150,000
2024	Regional multimodal performance assessment	100,000
2024	Household Travel Survey	1,000,000
2024	DTA model development for regional congestion mitigation and air quality model improvement	100,000
2024	Traffic volume counts	200,000
2024	Ortho Data Extraction	275,000
2024	Dial a Ride/Micro Transit Service Area Analysis	750,000
2025	Vanpool subsidies	150,000
2025	Regional Active Transportation Plan	100,000
2025	Exploratory planning tool development for uncertain future transportation system and environment	150,000
2025	Regional multimodal performance assessment	100,000
2025	Household Travel Survey	606,058
2025	DTA model development for regional congestion mitigation and air quality model improvement	100,000
2025	Traffic volume counts	200,000
2025	Ortho Data Extraction	138,000

Future CRP Planning

By building a foundation of data in plans that define the CRP issues and opportunities, PAG can then create new targets, strategies, and benchmarks. Beyond 2026, future recommendations for using CRP funding will emerge as a direct outcome of the foundational CRP strategies established in the current OWP.

Additionally, ADOT's Carbon Reduction Strategy due for submittal to FHWA by Nov. 15, 2023, will help inform the programming of the remaining CRP funds in the PAG region.

Justice40 Compliance

Specific federal funds allocated to regional planning and program administration, including CRP funding, align with Justice40 requirements. Through the implementation of the adopted CRP strategies, the entire region will benefit since the new strategies are regional in nature as outlined in the OWP. We will meet Justice40 requirements within each plan as it is developed, adding demographic measures for disadvantaged communities through tools like the Suncloud which incorporates the federal government's Climate and Economic Justice Screening Tool and U.S. DOT Equitable Transportation Community (ETC) data.

Committee Engagement

Prior to the Regional Council's approval of the new CRP strategies included in the OWP, the Management Committee, Transportation Planning Committee, and the Environmental Planning Advisory Committee have all engaged in discussions surrounding the CRP strategies. Notably, the Management Committee was invited to provide written comments, and while only one entity availed itself of this opportunity, it received a prompt and detailed written response. All three committees, along with the Regional Council, have received one or more presentations explaining the particulars of the new IIJA federal programs, with a particular focus on the CRP. In this regard, we draw your attention to the memo dated April 6, 2023 (attached), which comprehensively underscores the rationale and necessity of integrating CRP goals and objectives into PAG's planning and modeling efforts. As new plans and programs are developed, PAG will continue to engage committees in further discussions.

Finally, as underscored in the attached memo dated Sept. 26, 2023, and emphasized during the Sept. 28, 2023, Regional Council meeting, we are strongly committed to establishing a robust and integrated program that consistently adheres to federal guidelines. With your continued support, and by incorporating CRP into PAG's planning efforts, we are confident this program will outlast fluctuations in policy and federal funding allocations, ensuring its longevity and effectiveness.

We trust this information serves to provide you with a more comprehensive understanding of our ongoing efforts related to the Carbon Reduction Program. Should you require further clarification or additional information, please do not hesitate to contact me.

Date September 26, 2023

To: PAG Regional Council Members

From: Farhad Moghimi, Executive Director 

Re: Carbon Reduction Program Implementation Update

Thank you for your inquiries regarding Carbon Reduction Program (CRP) funding for regional planning and Pima Association of Governments' strategic approach to meeting the CRP's federal requirements.

PAG, designated as both the federally recognized Metropolitan Planning Organization (MPO) and the state's Air Quality Planning Agency, holds the responsibility for implementing air quality strategies to ensure compliance with air quality standards within its planning area. Below are the integrated strategies, adopted in May 2023 by the PAG Regional Council, which are all aimed at the common goal of reducing carbon emissions from on-road sources.

Currently, PAG is developing a comprehensive, data-driven process to collect, benchmark, implement, monitor, and report on the performance of these strategies in achieving emissions reduction within its planning area. Our approach is intentionally designed to be data-centric, systematic and sustainable, extending well beyond the typical five-to-six-year transportation reauthorization cycle. As part of our long-range planning commitment, we will conduct a thorough household survey to develop an updated assessment of travel patterns and transportation needs. We will use these valuable insights from the survey to validate parameters within our activity-based modeling, which is at the core of our transportation planning process.

Since PAG serves as the designated Air Quality Planning Agency, we are now able to leverage the Carbon Reduction funding, a new regional funding source, to align with our regional transportation planning efforts. These strategies, endorsed by the Regional Council, aim to establish the foundational, long-term planning framework for a sustainable carbon reduction program rather than being reactive to funding isolated projects without a clear means of evaluating their regional effectiveness.

Our strategic approach places a strong emphasis on capacity building, ensuring the long-term sustainability and effectiveness of our efforts. To establish a baseline for current emissions levels from on-road sources, we will set benchmarks and continuously monitor and report our progress in emission reduction. This approach equips us with the necessary tools to make data-driven comparisons among future

strategies, prioritizing those that offer the greatest regional benefits while aligning with our fiduciary responsibilities. Most importantly, this approach ensures that our region's air quality complies with the mandates of our MPO air quality conformity requirements and all other regulatory obligations.

It's important to clarify that the responsibility for planning and programming of regional funds falls on MPOs, not on the Federal Highway Administration (FHWA) and the Arizona Department of Transportation (ADOT). Nevertheless, we maintain a close, cooperative relationship with both agencies to ensure alignment, compliance, and concurrency with regional plans developed through a public planning process.

The following represents the data-driven, integrated planning strategies we are planning to implement to achieve our shared regional objective of reducing carbon emissions from on-road sources:

- Conduct a Comprehensive Household Travel Assessment and Study
- Align with the Travel Reduction Program
- Utilize Orthophotography Feature Data Extraction for additional data
- Complete a Regional Active Transportation Plan
- Conduct Exploratory Planning – Activity-Based Model and Study
- Update the Dynamic Traffic Assessment Model
- Conduct a Micro Transit Study
- Expand Carpool and Vanpool offerings
- Integrate with the Multimodal Performance Assessment
- Monitor progress through the ongoing Regional Traffic Count Program
- Confirm the interrelationship of all these efforts with the program goals of emission reductions

We have thoroughly reviewed this approach with our committees, and we are committed to reviewing data derived from various activities with respective committees throughout the planning process over the next two years. Currently, we have expanded staff coordination time and plan to kick off all other activities by the end of this fiscal year.

In contrast, Maricopa Association of Governments (MAG) has a different approach due to its unique Carbon Monoxide emissions status. They have maintained a long-standing program in response to their non-attainment status, utilizing Congestion Mitigation and Air Quality (CMAQ) funds for emissions reduction for many years. Now, they plan to complement their existing CMAQ strategies with Carbon Reduction funds, aligning them with CRP objectives.

The CMAQ Program provides funding to state DOTs, local governments, and transit agencies for projects and programs aimed at meeting federal Clean Air Act requirements by reducing mobile source emissions.

PAG, however, does not receive CMAQ funds due to our significantly better air quality compared to MAG. The allocation of CRP funds to PAG presents a unique opportunity to proactively develop a program rather than merely respond to a federal mandate. If executed correctly, this new program will remain resilient to fluctuations in federal funding sources or policies.

It is crucial to emphasize that our data-driven program serves the entire region and aligns seamlessly with regulatory requirements, as confirmed by our partners at FHWA and ADOT.

Unlike MAG, PAG has not been subject to the same mandates and has never received CMAQ funds. With the availability of CRP funds, we now have the opportunity to proactively develop our program and seamlessly integrate strategies into all our future planning efforts, ensuring compliance with regulatory mandates and the sustained well-being of our region.

This effort necessitates a regional approach that is required to align seamlessly with the state's efforts (due to be finalized in November 2023) to benchmark, implement, monitor and report our results.

The data-driven strategies approved by the Regional Council, as listed above, align with our regional mission and will be implemented over the next two years. This gives us an exciting and meaningful opportunity to gain insights that will inform and shape future planning activities. Ultimately, achieving our desired outcomes from these activities will serve to benefit our region well into the future.



September 22, 2023

Chairman Peter Yucupicio, Pascua Yaqui Tribe
PAG Chair

Dear Chairman Yucupio,

Subject: Carbon Reduction Program Funding

I am writing to request an update from PAG staff on the development of strategies to reduce transportation-related carbon emissions in the PAG region, specifically as it relates to the programming of federal Carbon Reduction Program (CRP) funding at our September 28 PAG Regional Council meeting. Please invite ADOT staff involved with administering the CRP program to attend to help clarify CRP eligibility.

As Mr. Moghimi's memo on this topic dated April 6, 2023 emphasized, the identification of carbon reducing strategies and programming of CRP funds should be developed as an "integral part of the regional transportation planning process". As such, I think it important for the Regional Council to understand how PAG staff are engaging our regional Transportation Planning Committee and Environmental Planning Advisory Committee in developing a process for programming these funds.

Additionally, guidance from the Federal Highway Administration (FHWA) for the implementation of CRP program funds emphasizes the importance of, "involving the public, including traditionally underserved and underrepresented populations in transportation planning ...[which] include minority and low-income populations but may also include many other demographic categories that face challenges engaging with the transportation process and receiving equitable benefits." How is PAG ensuring that this guidance is followed and underserved and underrepresented populations are benefitting from the CRP activities?

I'm concerned that \$6,359,321 of the anticipated \$11,500,000 of CRP funding made available to the PAG region through the Infrastructure Investment and Jobs Act (IIJA) has already been programmed in the PAG Overall Work Program (OWP) to support long-standing activities that PAG has already been performing without a meaningful discussion with the Regional Council or other relevant PAG committees about the optimal use of this critical *new* funding source.

These actions are at odds with what many other MPOs across the country are doing. Many MPOs are treating CRP funds like any other federal formula funds. Some have issued a call for projects, and many have had robust board and committee discussions on funding new carbon reduction activities in their regions.

In the case of Maricopa Association of Governments (MAG), on September 13, 2023, MAG's Management Committee met to discuss a recommendation for programming CRP funds in the MAG region in support of electric vehicle charging infrastructure and alternative fuel transit vehicle fleet and infrastructure projects. (See page 329 of the MAG Management Committee Meeting packet: https://azmag.gov/Portals/0/Committee-Meetings/2023/MC/MC_2023-09-13_Agenda-Packet.pdf?ver=z77R4AmAhYXJgaS9rQGvCQ%3d%3d)

In addition to a discussion at Regional Council, I would like to request that PAG staff provide a written update related to the following questions:

- How is the public and how are member jurisdictions being engaged in developing carbon reducing strategies and a *process* for programming CRP funds?
- What activities have been performed by PAG since incorporating CRP funding into the OWP in June 2022 and how much CRP funding has already been spent on them?
- What are the plans for spending the remaining CRP funds already programmed in the OWP in FY24 and FY25?
- What is the plan for programming the remaining CRP funds in the PAG region?
- How is PAG ensuring that CRP funding supports the Justice40 Initiative, which establishes a goal that at least 40 percent of the benefits of federal investments in climate and clean energy infrastructure are distributed to disadvantaged communities?
- Have the committees in charge of giving input been consulted in how to use these funds?

I'm concerned that as a region we are not utilizing this funding source to its fullest potential to achieve meaningful reductions in carbon emissions, and bypassing important implementation guidance from the Federal Highway Administration for the use of these funds. I have included a memo from FHWA regarding CRP guidance for your convenience. This memo is also available online at: https://www.fhwa.dot.gov/environment/sustainability/energy/policy/crp_guidance.pdf.

Being proactive about identifying meaningful and effective carbon emission reduction strategies is of utmost importance to our entire region. I value the opportunity to have an open dialogue with my colleagues on the Regional Council and to provide policy direction to PAG staff on the best use and process for these funds.

In community,



Mayor Regina Romero
City of Tucson

cc: Supervisor Rex Scott, Pima County, PAG Vice Chair

Mayor Paul Diaz, South Tucson, PAG Treasurer
Chairman Verlon Jose, Tohono O'odham Nation, PAG Member
Mayor Joe Winfield, Oro Valley, PAG Member
Mayor Ed Honea, Marana, PAG Member
Mayor Tom Murphy, Sahuarita, PAG Member
Ted Maxwell, Arizona State Transportation Board, PAG Member
Farhad Moghimi, PAG Executive Director
Thomas Benavidez, PAG Legal Counsel
Michael Ortega, Tucson City Manager
Sam Credio, Tucson Director of Transportation and Mobility



U.S. Department
of Transportation
**Federal Highway
Administration**

Memorandum

Subject: **INFORMATION:** Carbon Reduction Program
(CRP) Implementation Guidance

Date: April 21, 2022

From: Gloria M. Shepherd 
Associate Administrator, Office of Planning,
Environment, and Realty

In Reply Refer To:
HEP-1

To: Division Administrators
Directors of Field Services

On November 15, 2021, the President signed the Infrastructure Investment and Jobs Act (IIJA) (Public Law 117-58, also known as the “Bipartisan Infrastructure Law”) (BIL) into law. The BIL authorizes a new Carbon Reduction Program codified at 23 United States Code (U.S.C.) 175 to reduce transportation emissions. The attached Carbon Reduction Program (CRP) Implementation Guidance provides information on funding, eligible activities, and requirements of the CRP.

Except for the statutes and regulations cited, the contents of this document do not have the force and effect of law and are not meant to bind the States or the public in any way. This document is intended only to provide information regarding existing requirements under the law or agency policies.

This document will be accessible on the Sustainability Website ([FHWA Sustainability Website](#)), the BIL Website ([FHWA Bipartisan Infrastructure Law Website](#)), and through the Policy and Guidance Center ([FHWA Policy and Guidance Center](#)).

If you have questions, please contact: Becky Lupes (202-366-7808 or Rebecca.Lupes@dot.gov) or John Davies (202-366-6039 or JohnG.Davies@dot.gov) of the Office of Natural Environment.

Attachment

Carbon Reduction Program Implementation Guidance
(April 21, 2022)

TABLE OF CONTENTS

- A. **DEFINITIONS**
- B. **PROGRAM PURPOSE**
- C. **GUIDANCE ON ADMINISTRATION PRIORITIES AND USE OF THE FEDERAL-AID HIGHWAY FORMULA FUNDING**
- D. **GOVERNING AUTHORITIES**
- E. **FUNDING**
- F. **CARBON REDUCTION STRATEGIES**
- G. **ELIGIBILITIES AND COORDINATION REQUIREMENTS**
- H. **DAVIS-BACON ACT REQUIREMENTS**

A. Definitions

In this guidance, the following definitions apply:

Consultation means that one or more parties confer with other identified parties in accordance with an established process and, prior to taking action(s), considers the views of the other parties and periodically informs them about action(s) taken (*See* 23 CFR 450.104).

Coordination means the cooperative development of plans, programs, and schedules among agencies and entities with legal standing and adjustment of such plans, programs, and schedules to achieve general consistency, as appropriate (23 CFR 450.104).

Metropolitan Planning Organization means the policy board of an organization established as a result of the designation process under 23 U.S.C. 134(d) (23 U.S.C. 134(b)(2); 23 U.S.C. 175(a)(1)).

Transportation Emissions means carbon dioxide emissions from on-road highway sources of those emissions within a State (23 U.S.C. 175(a)(2)).

Transportation Management Area means a transportation management area identified or designated by the Secretary under 23 U.S.C. 134(k)(1) (*See* 23 U.S.C. 175(a)(3)).

Urbanized Area means a geographic area with a population of 50,000 or more, as determined by the Bureau of the Census (23 U.S.C. 134(b)(7); 23 U.S.C. 175(a)(1)).

B. PROGRAM PURPOSE

The purpose of the Carbon Reduction Program (CRP) is to reduce transportation emissions through the development of State carbon reduction strategies and by funding projects designed to reduce transportation emissions (*See* 23 U.S.C. 175 as established by the Infrastructure Investment and Jobs Act (IIJA) (Public Law 117-58, also known as the “[Bipartisan Infrastructure Law](#)” (BIL)) (BIL § 11403).

C. GUIDANCE ON ADMINISTRATION PRIORITIES AND USE OF THE FEDERAL-AID HIGHWAY FORMULA FUNDING

- 1. Overview:** This document provides background and guidance to clarify eligibility requirements for the CRP. On December 16, 2021, FHWA issued guidance, [Policy on Using Bipartisan Infrastructure Law Resources to Build a Better America](#), that serves as an overarching framework to prioritize the use of BIL resources on projects that will Build a Better America. That policy is available on FHWA’s BIL resources implementation website at the following URL: https://www.fhwa.dot.gov/bipartisan-infrastructure-law/building_a_better_america-policy_framework.cfm.

2. Safety:

Prioritizing Safety in All Investments and Projects

The National Roadway Safety Strategy (NRSS) (issued January 27, 2022) commits the United States Department of Transportation (USDOT) and FHWA to respond to the current crisis in traffic fatalities by “taking substantial, comprehensive action to significantly reduce serious and fatal injuries on the Nation’s roadways,” in pursuit of the goal of achieving zero highway deaths. FHWA recognizes that zero is the only acceptable number of deaths on our roads and achieving that is our safety goal. FHWA therefore encourages States and other funding recipients to prioritize safety in all Federal highway investments and in all appropriate projects, using relevant Federal-aid funding, including funds from CRP.

The Safe System approach addresses the safety of all road users, including those who walk, bike, drive, ride transit, and travel by other modes. It involves a paradigm shift to improve safety culture, increase collaboration across all safety stakeholders, and refocus transportation system design and operation on anticipating human mistakes and lessening impact forces to reduce crash severity and save lives. To achieve the vision of zero fatalities, safety should be fully reflected in a State’s transportation investment decisions, from planning and programming, environmental analysis, project design, and construction, to maintenance and operations. States should use data-driven safety analyses to ensure that safety is a key input in any decision made in the project development process and fully consider the safety of all road users in project development.

FHWA encourages State and local agencies to consider the use of funds from CRP to address roadway safety and implement the Safe System approach wherever possible. Improvements to safety features, including traffic signs, pavement markings, and multimodal accommodations that are routinely provided as part of a broader Federal-aid highway project can and should be funded from the same source as the broader project as long as the use is eligible under that funding source.

Because of the role of speed in fatal crashes, FHWA is also providing new resources on the setting of speed limits and on re-engineering roadways to help “self-enforce” speed limits. To achieve the vision of zero fatalities on the Nation’s roads, FHWA encourages States to assess safety outcomes for all project types and promote and improve safety for all road users, particularly vulnerable users. FHWA recommends that streets be designed and operated to maximize the existing right-of-way for accommodation of nonmotorized modes and transit options that increase safety and connectivity. Pedestrian facilities in the public right-of-way must comply with the Americans with Disabilities Act.

Complete Streets

As one approach to ensuring the safety of all roadway users, FHWA encourages States and communities to adopt and implement Complete Streets policies that prioritize the safety of all users in transportation network planning, design, construction and operations. Section 11206 of the BIL defines Complete Streets standards or policies as

those which “ensure the safe and adequate accommodation of all users of the transportation system, including pedestrians, bicyclists, public transportation users, children, older individuals, individuals with disabilities, motorists, and freight vehicles.” A complete street includes, but is not limited to, sidewalks, bike lanes (or wide paved shoulders), special bus lanes, accessible public transportation stops, safe and accommodating crossing options, median islands, pedestrian signals, curb extensions, narrower travel lanes, and roundabouts. A Complete Street is safe, and feels safe, for everyone using the street.

- 3. Transit Flex:** FHWA, working with FTA, seeks to help Federal-aid recipients plan, develop, and implement infrastructure investments that prioritize safety, mobility, and accessibility for all transportation network users, including pedestrians, bicyclists, transit riders, micromobility users, freight and delivery services providers, and motorists. This includes the incorporation of data sharing principles and data management.

Funds from CRP can be “flexed” to FTA to fund transit projects. For title 23 funds that are flexed to FTA, section 104(f) of title 23, U.S.C., allows funds made available for transit projects or transportation planning to be transferred to FTA and administered in accordance with chapter 53 of title 49, U.S.C., except that the Federal share requirements of the original fund category continue to apply (See 23 U.S.C. 104(f)(1)).

The use of Federal-aid funding on transit and transit-related projects can provide an equitable and safe transportation network for travelers of all ages and abilities, including those from marginalized communities facing historic disinvestment. FHWA encourages recipients to consider using funding flexibility for transit or multimodal-related projects and to consider strategies that: (1) improve infrastructure for nonmotorized travel, public transportation access, and increased public transportation service in underserved communities; (2) plan for the safety of all road users, particularly those on arterials, through infrastructure improvements and advanced speed management; (3) reduce single-occupancy vehicle travel and associated air pollution in communities near high-volume corridors; (4) offer reduced public transportation fares as appropriate; (5) target demand-response service towards communities with higher concentrations of older adults and those with poor access to essential services; and (6) use equitable and sustainable practices while developing transit-oriented development.

- 4. Transferability Between FHWA Programs:** Section 126 of title 23, U.S.C., provides that a State may transfer up to 50 percent of the amount apportioned for the fiscal year for certain highway programs, including CRP, to other eligible apportioned highway programs.¹ See also FHWA Order 4551.1, “Fund Transfers to Other Agencies and Among Title 23 Programs”, ([Fund Transfers to Other Agencies and Among Title 23 Programs](#)). Historically States have used this flexibility to address unmet needs in areas where apportioned funding was insufficient.

The BIL made historic investments in highway programs including more than \$300 billion in Contract Authority from the Highway Trust Fund. This represents an average

¹ States may only transfer CRP funds that are allocated for use anywhere in the State.

annual increase of 29 percent in Federal-aid funding over the amount of Contract Authority for FHWA programs compared to fiscal year 2021. Congress also established more than a dozen new highway programs to help address urgent surface transportation needs.

States have the flexibility to transfer funds out of CRP to other apportioned programs, but we encourage States to first consider the need to transfer in light of the significant increase in apportioned funding and the considerable funding for new programs. States, working with FHWA, should determine the need for CRP funds – including the ability to apply CRP funds to eligible assets owned by local governments, counties, and Tribes – and identify and prioritize projects that maximize the CRP funding before deciding to transfer funds out of the CRP.

- 5. ADA:** The Americans with Disabilities Act (ADA) of 1990 and Section 504 of the Rehabilitation Act of 1973 prohibit discrimination against people with disabilities and ensure equal opportunity and access for persons with disabilities. The Department of Transportation’s Section 504 regulations apply to recipients of the Department’s financial assistance (*See* 49 CFR 27.3(a)). Title II of the ADA applies to public entities regardless of whether they receive Federal financial assistance (*See* 28 CFR 35.102(a)). The ADA requires that no qualified individual with a disability shall, because a public entity’s facilities are inaccessible to or unusable by individuals with disabilities, be excluded from participation in, or be denied the benefits of the services, programs, or activities of a public entity, or be subjected to discrimination by any public entity (*See* 28 CFR 35.149). A public entity’s pedestrian facilities are considered a “service, program, or activity” of the public entity. As a result, public entities and recipients of Federal financial assistance are required to ensure the accessibility of pedestrian facilities in the public right-of-way, such as curb ramps, sidewalks, crosswalks, pedestrian signals, and transit stops in accordance with applicable regulations.

If the project reduces transportation emissions, funds from CRP are available to improve accessibility and to implement recipients’ ADA transition plans and upgrade their facilities to eliminate physical obstacles and provide for accessibility for individuals with disabilities. FHWA will provide oversight to recipients of CRP funds to ensure that each public agency's project planning, design, and construction programs comply with ADA and Section 504 accessibility requirements.

- 6. Equity:** The BIL provides considerable resources to help States and other funding recipients advance projects that consider the unique circumstances affecting community members’ mobility needs and allocate resources consistently with those needs, enabling the transportation network to effectively serve all community members. FHWA will work with States to ensure consideration of using CRP funds for projects and inclusion of project elements that proactively address racial equity, workforce development, economic development, and remove barriers to opportunity, including automobile dependence in both rural and urban communities as a barrier to opportunity or to redress prior inequities and barriers to opportunity.

Federal-aid recipients, including recipients of CRP funds, are responsible for involving the public, including traditionally underserved and underrepresented populations in transportation planning and complying with participation and consultation requirements in 23 CFR 450.210 and 23 CFR 450.316, as applicable. “Underserved populations” include minority and low-income populations but may also include many other demographic categories that face challenges engaging with the transportation process and receiving equitable benefits (See [FHWA's Environmental Justice Reference Guide](#) for additional information). In addition, CRP projects can support the Justice40 Initiative, which establishes a goal that at least 40 percent of the benefits of federal investments in climate and clean energy infrastructure are distributed to disadvantaged communities. (See [OMB's Interim Implementation Guidance for the Justice40 Initiative](#) or its successor for additional information).

To assist with these public engagement efforts, FHWA expects recipients of CRP funds to engage with all impacted communities and community leaders to determine which forms of communication are most effective. Recipients should gain insight on the unique circumstances impacting various disadvantaged and underrepresented groups so that new channels for communication may be developed. And, the recipients should use this information to inform decisions across all aspects of project delivery including planning, project selection, and the design process.

Among other things, recipients of CRP funds are also required to assure equitable treatment of workers and trainees on highway projects through compliance with Equal Employment Opportunity requirements under 23 CFR Part 230, Subpart A, as well as ensuring nondiscrimination in all of their operations on the basis of race, color, or national origin under Title VI of the Civil Rights Act of 1964. Recipients of CRP funds should ensure that they have the capacity and expertise to address Federal civil rights protections that accompany grant awards.

- 7. Climate Change and Sustainability:** The United States is committed to a whole-of-government approach to reducing economy-wide net greenhouse gas pollution by 2030. The BIL provides considerable resources—including new programs and funding—to help States and other funding recipients advance this goal in the transportation sector. In addition, the BIL makes historic investments to improve the resilience of transportation infrastructure, helping States and communities prepare for hazards such as wildfires, floods, storms, and droughts exacerbated by climate change.

FHWA encourages the advancement of projects that address climate change and sustainability. To enable this, FHWA encourages recipients to consider climate change and sustainability throughout the planning and project development process, including the extent to which projects under CRP align with the President’s greenhouse gas reduction, climate resilience, and environmental justice commitments. In particular, consistent with the statute and guidance below, recipients should fund projects that reduce carbon dioxide emissions. FHWA encourages recipients to fund projects that support fiscally responsible land use and transportation efficient design, or incorporate electrification or zero emission vehicle infrastructure. In addition, FHWA encourages

recipients to consider projects under CRP that support climate change resilience, including consideration of the risks associated with wildfires, drought, extreme heat, and flooding, in line with guidance for projects in floodplains. FHWA also encourages recipients to consider projects under CRP that address environmental justice concerns.

- 8. Labor and Workforce:** Highway programs, including CRP, may provide opportunities to support the creation of good-paying jobs, including jobs with the free and fair choice to join a union, and the incorporation of strong labor standards, such as the use of project labor agreements; employer neutrality with respect to union organizing; the use of an appropriately trained workforce (in particular registered apprenticeships and other joint labor-management training programs); and the use of an appropriately credentialed workforce in project planning stages and program delivery.

Recipients should work with FHWA, to the extent possible, to identify opportunities for Federal-aid highway investments to advance high-quality job creation through the use of local or other geographic or economic hire provisions authorized under section 25019 in the BIL, and Indian employment preference for projects that are located on or near Tribal reservations authorized under 23 U.S.C. 140(d), or other workforce strategies targeted at expanding workforce training opportunities for people to get the skills they need to compete for these jobs, especially underrepresented populations: women, people of color, and groups with other systemic barriers to employment (people with disabilities, formerly incarcerated, etc.).

- 9. Truck Parking:** Truck parking shortages are a national concern affecting the efficiency of U.S. supply chains and safety for truck drivers and other roadway users. Jason's Law, which was passed in 2012, established a national priority on addressing the shortage of long-term parking for commercial motor vehicles on the National Highway System (NHS).

Many Federal-aid highway funding programs have eligibility for truck parking projects, including the CRP. CRP funds may be obligated for a project on an eligible facility that reduces transportation emissions. FHWA anticipates that such projects may support progress toward the achievement of national performance goals for improving infrastructure condition, safety, congestion reduction, system reliability, or freight movement on the NHS. Advanced truck stop electrification systems are eligible under 23 U.S.C. 175(c)(1)(A) and projects that reduce transportation emissions at port facilities are eligible under 23 U.S.C. 175(c)(1)(M).

States should consider working with private sector truck stop operators and the trucking community in the siting and development of specific truck parking projects. States also are encouraged to offer opportunities for input from commercial motor vehicle drivers and truck stop operators through their State Freight Advisory Committees established under 49 U.S.C. 70201.

D. GOVERNING AUTHORITIES

- 1.** Section 11101 of the BIL authorizes contract authority for the CRP.

2. Section 11104 of the BIL updates apportionment instructions in 23 U.S.C. 104.
3. Section 11403 of the BIL establishes the CRP in 23 U.S.C. 175.

E. FUNDING

1. **Authorization Levels:** Estimated annual CRP funding under the BIL is:

Estimated Annual CRP Funding	
Fiscal Year (FY) 2022	\$1.234 B
FY 2023	\$1.258 B
FY 2024	\$1.283 B
FY 2025	\$1.309 B
FY 2026	\$1.335 B

The BIL sets each State’s initial share of Federal-aid highway program apportioned (formula) funds annually based on the share of formula funds each State received in fiscal year 2021. The methodology for calculating the apportionments for FY 2022 under 23 U.S.C. 175 is discussed in FHWA Notice [N4510.858](#). For FY 2023 through 2026 funds, please revisit [FHWA’s Notice website](#) at the appropriate future time.

The Fiscal Management Information System Program Codes for these CRP funds are as follows:

Program Code	Program Description	Title 23 Reference
Y600	Carbon Reduction Program (CRP) Flexible	Section 175(e)(1)(B); Section 104(b)(7)
Y601	CRP – Urbanized Areas with Population Over 200K	Section 175(e)(1)(A)(i)
Y606	CRP – Urbanized Areas with Population 50K to 200K	Section 175(e)(1)(A)(ii)
Y607	CRP – Urban Areas with Population 5K to 49,999	Section 175(e)(1)(A)(iii)
Y608	CRP – Areas with Population less than 5K	Section 175(e)(1)(A)(iv)

For urbanized areas with population over 200K and urbanized areas with population 50K to 200K, the CRP funding in FMIS will be provided at the individual urbanized area level.²

² For example see [FHWA Notice N 4510.864 Fiscal Year \(FY\) 2022 Supplementary Tables – Table 18 - Apportionments Pursuant to the Infrastructure Investment and Jobs Act](#) and [FHWA Notice N 4510.864 Fiscal Year \(FY\) 2022 Supplementary Tables – Table 19 - Apportionments Pursuant to the Infrastructure Investment and Jobs Act](#).

2. **Period of Availability:** CRP funds are contract authority. CRP obligations are reimbursed from the Highway Account of the Highway Trust Fund. CRP funds are available for obligation for a period of 3 years after the last day of the fiscal year for which the funds are authorized (*See* 23 U.S.C. 118(b)). Thus, CRP funds are available for obligation for up to 4 years.
3. **Obligation Limitation:** CRP funds are subject to the annual obligation limitation imposed on the Federal-aid highway program.

In general, a State that is required under 23 U.S.C. 175(e) to obligate CRP funds in an urbanized area with an urbanized area population of 50,000 or more shall make available during the period of fiscal years 2022 through 2026 an amount of obligation authority distributed to the State for Federal-aid highways and highway safety construction programs for use in the area that is equal to the amount obtained by multiplying:

- a. the aggregate amount of funds that the State is required to obligate in the area under this subsection during the period; and
- b. the ratio that—
 - i. the aggregate amount of obligation authority distributed to the State for Federal-aid highways and highway safety construction programs during the period; bears to
 - ii. the total of the sums apportioned to the State for Federal-aid highways and highway safety construction programs (excluding sums not subject to an obligation limitation) during the period. (*See* 23 U.S.C. 175(e)(6)(A))

Each State, each affected Metropolitan Transportation Planning Organization (MPO), and the Secretary shall jointly ensure compliance with 23 U.S.C. 175(e)(6)(A). (*See* 23 U.S.C. 175(e)(6)(B))

4. **Federal share:** The Federal share for CRP-funded projects is governed by 23 U.S.C. 120, as amended by the BIL. It is generally 80 percent (*See* 23 U.S.C. 120(b)).
5. **Combining CRP Funds with Other Eligible USDOT funding:** CRP funds can be spread further by combining them with other eligible USDOT funding for projects that support the reduction of transportation emissions, if the eligibility requirements and applicable Federal share are met for each program.
6. **Deobligations of Other Title 23 Obligated Funds:** Project Agreements should not be modified to replace one Federal fund category with another unless specifically authorized by statute (*See* 23 CFR 630.110(a)).
7. **Suballocation Within a State** (*See* 23 U.S.C. 175(e))
Specified Areas
For each fiscal year, 65 percent of funds apportioned to the State for the CRP shall be obligated, in proportion to their relative shares of the population in the State:

- In urbanized areas of the State with an urbanized area population of more than 200,000 (these funds may be obligated in the metropolitan area established under 23 U.S.C.134 that encompasses the urbanized area.);
- In urbanized areas of the State with an urbanized population of not less than 50,000 and not more than 200,000;
- In urban areas of the State with a population of not less than 5,000 and not more than 49,999; and
- In other areas of the State with a population of less than 5,000.

The State may obligate these funds suballocated for specified areas based on other factors if the State and relevant MPOs jointly apply to the Secretary for permission to base the obligation on other factors, and the request is approved by the Secretary.

Any Area of State

The remaining 35 percent of funds apportioned to a State for the CRP each fiscal year may be obligated in any area of the State.

F. CARBON REDUCTION STRATEGIES

1. **General:** By November 15, 2023, States are required to develop a Carbon Reduction Strategy in consultation with any MPO designated within the State (23 U.S.C. 175(d)(1)). The State Carbon Reduction Strategy shall support efforts to reduce transportation emissions and identify projects and strategies to reduce these emissions. The Carbon Reduction Strategy must be updated at least once every four years (23 U.S.C. 175(d)(3) and (4)). States and MPOs are encouraged to obligate CRP funding for projects that support implementation of the State’s Carbon Reduction Strategy.
2. **Development:** States, in coordination with MPOs, are encouraged to develop their Carbon Reduction Strategies as an integral part of their transportation planning processes, such as by integrating them into the State’s Long-Range Statewide Transportation Plan (LRSTP), the MPO’s Metropolitan Transportation Plan (MTP), or by developing a separate document which is incorporated by reference into the LRSTP and MTP.

States may request technical assistance from FHWA for the development of their Carbon Reduction Strategy (*See* 23 U.S.C. 175(d)(5)).

Development of a Carbon Reduction Strategy is an allowable use of CRP funds (see Eligibilities below).

3. **Contents:** Each Carbon Reduction Strategy shall (*See* 23 U.S.C. 175(d)(2)):
 - A. support efforts to reduce transportation emissions;
 - B. identify projects and strategies to reduce transportation emissions, which may include projects and strategies for safe, reliable, and cost-effective options—
 - i. to reduce traffic congestion by facilitating the use of alternatives to single-occupant vehicle trips, including public transportation facilities, pedestrian facilities, bicycle facilities, and shared or pooled vehicle trips within the State

- or an area served by the applicable MPO, if any;
 - ii. to facilitate the use of vehicles or modes of travel that result in lower transportation emissions per person-mile traveled as compared to existing vehicles and modes; and
 - iii. to facilitate approaches to the construction of transportation assets that result in lower transportation emissions as compared to existing approaches;
 - C. support the reduction of transportation emissions of the State;
 - D. at the discretion of the State, quantify the total carbon emissions from the production, transport, and use of materials used in the construction of transportation facilities within the State; and
 - E. be appropriate to the population density and context of the State, including any metropolitan planning organization designated within the State.
- 4. Review:** Not later than 90 days after the State submits a request for the approval of a Carbon Reduction Strategy, the Secretary will review the process used to develop the Carbon Reduction Strategy and either certify that the Carbon Reduction Strategy meets the requirements of 23 U.S.C. 175(d)(2) or deny certification and specify the actions necessary for the State to take to correct the deficiencies in the State’s process for developing the Carbon Reduction Strategy (23 U.S.C. 175(d)(4)).

G. ELIGIBILITIES AND COORDINATION REQUIREMENTS

- 1. General:** CRP funding may be used on a wide range of projects that support the reduction of transportation emissions. Projects must be identified in the Statewide Transportation Improvement Program (STIP)/Transportation Improvement Program (TIP) and be consistent with the Long-Range Statewide Transportation Plan and the Metropolitan Transportation Plan(s). (23 U.S.C. 134 and 23 U.S.C. 135)

Projects are subject to requirements under the National Environmental Policy Act (42 U.S.C. 4321 *et seq.*), the Uniform Relocation Assistance and Real Property Acquisition Act of 1970 (42 U.S.C. 4601 *et seq.*), and other applicable Federal laws. Projects funded with CRP funds are required to be treated as projects on Federal-aid highways (23 U.S.C. 175(g)).

2. Program Evaluation

States are encouraged to incorporate program evaluation including associated data collection activities from the outset of their program design and implementation to meaningfully document and measure their progress towards meeting an agency priority goal(s). Title I of the Foundations for Evidence-Based Policymaking Act of 2018 (Evidence Act), Pub. L. No. 115-435 (2019) urges federal awarding agencies to use program evaluation as a critical tool to learn, to improve equitable delivery, and to elevate program service and delivery across the program lifecycle. Evaluation means “an assessment using systematic data collection and analysis of one or more programs, policies, and organizations intended to assess their effectiveness and efficiency.” Evidence Act § 101 (codified at 5 U.S.C. § 311). Credible program evaluation activities are implemented with relevance and utility, rigor,

independence and objectivity, transparency, and ethics (OMB Circular A-11, Part 6 Section 290).

Evaluation costs are allowable costs unless prohibited by statute or regulation, and such costs may include the personnel and equipment needed for data infrastructure and expertise in data analysis, performance, and evaluation. (2 CFR Part 200).

- 3. Eligible Activities:** Subject to the general eligibility requirements described in Section E.1 of this memorandum, the following activities are listed as eligible under 23 U.S.C. 175(c):
- A. a project described in 23 U.S.C. 149(b)(4) to establish or operate a traffic monitoring, management, and control facility or program, including advanced truck stop electrification systems;
 - B. a public transportation project eligible for assistance under 23 U.S.C. 142 (this includes eligible capital projects for the construction of a bus rapid transit corridor or dedicated bus lanes as provided for in BIL Section 11130 (23 U.S.C. 142(a)(3));
 - C. a [transportation alternatives project](#) as described in 23 U.S.C. 101(a)(29) as in effect prior to the enactment of the FAST Act,³ including the construction, planning, and design of on-road and off-road trail facilities for pedestrians, bicyclists, and other nonmotorized forms of transportation;
 - D. a project described in section 23 U.S.C. 503(c)(4)(E) for advanced transportation and congestion management technologies;
 - E. a project for the deployment of infrastructure-based intelligent transportation systems capital improvements and the installation of vehicle-to-infrastructure communications equipment, including retrofitting dedicated short-range communications (DSRC) technology deployed as part of an existing pilot program to cellular vehicle-to-everything (C-V2X) technology;
 - F. a project to replace street lighting and traffic control devices with energy-efficient alternatives;
 - G. development of a carbon reduction strategy (as described in the Carbon Reduction Strategies section above);
 - H. a project or strategy designed to support congestion pricing, shifting transportation demand to nonpeak hours or other transportation modes, increasing vehicle occupancy rates, or otherwise reducing demand for roads, including electronic toll collection, and travel demand management strategies and programs;
 - I. efforts to reduce the environmental and community impacts of freight movement;
 - J. a project to support deployment of alternative fuel vehicles, including—
 - (i.) the acquisition, installation, or operation of publicly accessible electric vehicle charging infrastructure or hydrogen, natural gas, or propane vehicle fueling infrastructure; and
 - (ii.) the purchase or lease of zero-emission construction equipment and vehicles, including the acquisition, construction, or leasing of required supporting facilities;
 - K. a project described under 23 U.S.C. 149(b)(8) for a diesel engine retrofit;
 - L. certain types of projects to improve traffic flow that are eligible under the CMAQ

³ See [Transportation Alternatives Set-Aside Implementation Guidance as Revised by the Infrastructure Investment and Jobs Act](#)

- program, and that do not involve construction of new capacity; (23 U.S.C. 149(b)(5) and 175(c)(1)(L)); and
- M. a project that reduces transportation emissions at port facilities, including through the advancement of port electrification.

Other projects that are not listed above may be eligible for CRP funds if they can demonstrate reductions in transportation emissions over the project's lifecycle. Consistent with the CRP's goal of reducing transportation emissions, projects to add general-purpose lane capacity for single occupant vehicle use will not be eligible absent analyses demonstrating emissions reductions over the project's lifecycle. For example, the following project types may be eligible for CRP funding:

Sustainable pavements and construction materials

Sustainable pavements technologies that reduce embodied carbon during the manufacture and/or construction of highway projects could be eligible for CRP if a lifecycle assessment (LCA) demonstrates substantial reductions in CO₂ compared to the implementing Agency's typical pavement-related practices. The [LCA Pave Tool](#) can be used to assess the CO₂ impacts of pavement material and design decisions.

Climate Uses of Highway Right-of-Way

Projects including alternative uses of highway right-of-way (ROW) that reduce transportation emissions are also eligible. For example, renewable energy generation facilities, such as solar arrays and wind turbines, can reduce transportation emissions. And, biologic carbon sequestration practices along highway ROW to capture and store CO₂ may demonstrate potential for substantial long-term transportation emissions reductions. [State DOTs Leveraging Alternative Uses of the Highway Right-of-Way Guidance](#) provides information on these practices.

Mode Shift

Projects that maximize the existing right-of-way for accommodation of nonmotorized modes and transit options that increase safety, equity, accessibility, and connectivity may be eligible. Projects that separate motor vehicles from pedestrians and bicyclists, match vehicle speeds to the built environment, increase visibility (e.g., lighting), and advance implementation of a Safe System approach and improve safety for vulnerable road users may also be eligible. Micromobility and electric bike projects, including charging infrastructure, may also be eligible.

States should work with the FHWA on eligibility questions for specific projects. The [CMAQ Emissions Calculator Toolkit](#) is an available resource for estimating the CO₂ emissions benefits of certain projects.

4. Flexibility on Use of Funds and Certification of Emissions Reduction

In addition to the above eligibilities, a State may use funds apportioned under CRP for any project eligible under the Surface Transportation Block Grant program (23 U.S.C 133(b)) if the Secretary certifies that the State has demonstrated a reduction in

transportation emissions (1) as estimated on a per capita basis, and (2) as estimated on a per unit of economic output basis. In the first year of this program, States should initially focus on developing their Carbon Reduction Strategies and using CRP funding to begin implementing their Carbon Reduction Strategies once adopted to establish a baseline; for this reason, the Secretary will not certify flexibility for the CRP until at least FY 2023. FHWA will publish additional guidance on the process under which the Secretary will certify state transportation emissions reductions. Section C.4 of this memo discusses the separate flexibility on transferability between FHWA programs.

5. Consultation and Coordination

Coordination in Urbanized Areas

Before obligating funds for eligible projects in an urbanized area that is not a transportation management area, a State must coordinate with any MPO that represents the urbanized area prior to determining which activities should be carried out under the project (23 U.S.C. 175(e)(4)). The State and MPO must also use their documented public involvement processes, including their process for seeking out and considering the needs of those traditionally underserved by existing transportation systems, such as low-income and minority households, who may face challenges accessing employment and other services (23 U.S.C. 450.210(a)(1)(viii) and 450.316(a)(1)(vii)).

Consultation in Rural Areas

Before obligating funds for an eligible project in a rural area, a State must consult with any regional transportation planning organization or MPO that represents the rural area prior to determining which activities should be carried out under the project (23 U.S.C. 175(e)(5)). The State and MPO must also use their documented public involvement processes, including their process for seeking out and considering the needs of those traditionally underserved by existing transportation systems, such as low-income and minority households, who may face challenges accessing employment and other services (23 U.S.C. 450.210(a)(1)(viii) and 450.316(a)(1)(vii)).

H. DAVIS-BACON ACT REQUIREMENTS

As provided at 23 U.S.C 175(g), all projects funded with CRP funding shall be treated as located on a Federal-aid highway. Accordingly, 23 U.S.C 113 applies, and Davis-Bacon wage rates must be paid. In general, Davis-Bacon requires that all laborers and mechanics employed by the applicant, subrecipients, contractors or subcontractors in the performance of construction, alteration, or repair work on an award or project in excess of \$2000 funded directly by or assisted in whole or in part by funds made available under CRP shall be paid wages at rates not less than those prevailing on similar projects in the locality, as determined by the Secretary of Labor in accordance with subchapter IV of chapter 31 of title 40, United States Code commonly referred to as the “Davis-Bacon Act” (DBA).

For additional guidance on how to comply with DBA provisions and clauses, see <https://www.dol.gov/agencies/whd/government-contracts/construction> and

<https://www.dol.gov/agencies/whd/government-contracts/protections-for-workers-in-construction>. See also <https://www.fhwa.dot.gov/construction/cqit/dbacon.cfm>.

MEMO

Date: April 6, 2023

To: PAG Management Committee
Transportation Planning Committee (TPC)
Environmental Planning Advisory Committee (EPAC)

From: Farhad Moghimi 
Executive Director

Re: Carbon Reduction Strategies

As per 23 U.S.C. 175(d)(1), States must develop a Carbon Reduction Strategy in consultation with any MPO designated within the State by Nov. 15, 2023. The State Carbon Reduction Strategy aims to support efforts to reduce transportation emissions and identifies strategies to minimize these emissions. The Carbon Reduction Strategy must be updated at least once every four years as per 23 U.S.C. 175(d)(3) and (4). States and MPOs are encouraged to allocate Carbon Reduction funding for initiatives that facilitate the implementation of the State's Carbon Reduction Strategy.

States and MPOs are further advised to develop their Carbon Reduction Strategies as an integral part of their transportation planning processes. This can be achieved by integrating them into the State's Long-Range Statewide Transportation Plan (LRSTP) or the MPO's Regional Mobility and Accessibility Plan (RMAP).

The Carbon Reduction Program has been added to the PAG FY 2024 and FY 2025 Overall Work Program (OWP) as a subelement of the Transportation Activities work element. Currently, several planning initiatives related to the reduction of carbon emissions, such as the creation of a Regional Active Transportation Report, Sun Rideshare initiatives, and data tools are a part of the draft OWP. Once the State has released its Carbon Reduction Strategy at or after November 2023, there may be further potential changes to the strategies in the OWP to align with the state's strategies.

Metropolitan Planning Organizations (MPOs) play a crucial role in transportation planning and decision-making, particularly in the context of carbon reduction activities. The Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) have identified carbon reduction as a planning emphasis area for MPOs, which underscores the importance of Pima Association of Governments (PAG) in leading

regional efforts to reduce greenhouse gas emissions from transportation as defined by the FHWA and FTA. In fact, the importance of MPOs in leading the development of the Carbon Reduction Strategies can be captured in at least five ways.

- 1- MPOs are uniquely positioned to facilitate coordination and collaboration among diverse stakeholders in the region. Development of a Carbon Reduction Strategy and associated long-range planning will require the involvement of a wide range of actors, including federal agencies, public transportation providers, local governments and community groups. MPOs can bring these stakeholders together and provide a platform for dialogue and decision-making. By convening stakeholders and fostering collaboration, MPOs can help to identify common goals, establish regional priorities, and develop regional strategies for reducing carbon emissions from transportation. Before finalizing PAG's regional strategies, however, it is important to wait for the finalization of the State Carbon Reduction Strategy.
- 2- MPOs have a comprehensive understanding of regional transportation systems and the factors that influence travel behavior. MPOs are responsible for developing long-range transportation plans, which include an analysis of current and future transportation demand, system performance, and environmental impacts. Furthermore, several Carbon Reduction Program eligibilities prioritize the deployment of advanced transportation management technologies and system performance data collection and analysis. By leveraging this knowledge, MPOs can develop carbon reduction strategies that are tailored to the unique characteristics and needs of the region.
- 3- MPOs have access to additional planning funding and resources that can support the implementation of carbon reducing initiatives flowing from the greater strategies and planning. The FHWA and FTA provide competitive grant funding for transportation planning and infrastructure projects, including those that support carbon reduction goals. MPOs can leverage these resources to support grant applications for projects that reduce emissions from transportation, such as transit service improvements, bicycle and pedestrian infrastructure, and transit-oriented development. A similar example is PAG's Safety Explorer which is used to apply for HSIP-Safety competitive grants. By securing funding and resources, MPOs can overcome financial barriers to implementing carbon reduction strategies and make progress toward regional goals.
- 4- MPOs can play a key role in engaging the public and building support for carbon reduction strategies as part of the region's long-range plan known as RMAP. Public outreach and engagement are critical for ensuring that the Carbon Reduction Program reflects the needs and priorities of the entire region, and for

building public support for these initiatives. MPOs can leverage their relationships with local governments and community organizations to facilitate outreach and engagement. By engaging the public and building support for Carbon Reduction Strategies, MPOs can ensure that these strategies and initiatives are sustainable and effective in the long term.

- 5- MPOs are accountable to federal and state agencies for transportation planning and decision-making. As mentioned above, the FHWA and FTA require MPOs to incorporate carbon reduction as a planning emphasis area, which underscores the importance of MPOs in leading regional efforts to reduce greenhouse gas emissions from transportation. By taking a leadership role in carbon reduction programs, PAG can continue to demonstrate its commitment to meeting federal and state requirements and ensure that the region is making progress toward meeting carbon reduction goals.

While the State of Arizona takes the lead on developing a State Carbon Reduction Strategy with the support of MPOs, PAG ultimately will be responsible to set up the Carbon Reduction Program for success in the PAG planning area. By taking a leadership role in the Carbon Reduction Program, PAG can help to create more sustainable and livable communities and reduce the impact of transportation on the environment, consistent with its mission.