



The Regional Transportation Advisory Committee meeting will be held on **Friday, November 18, 2016**, from **9 a.m. to 11 a.m.**, in the **6th Floor Training Room 679**, Clark County Public Service Center, 1300 Franklin Street, Vancouver, Washington.

## A G E N D A

- I. Call to Order and Approval of October 21, 2016 Minutes, Action
- II. Bus On Shoulder Feasibility Study – Update, Discussion
- III. YR 2017 Work Program\*
- IV. Transportation Performance Management: Rulemaking and Timelines, Discussion
- V. 2040 Land Use Forecast and TAZ Allocation, Discussion
- VI. Other Business
  - A. RTAC Members
  - B. RTC Staff
    - a. TIB Grant Notifications
    - b. Project Showcase Completions
    - c. WTP Update
    - d. At Grade Rail Crossings

*\*Materials available at meeting*

*Served by C-TRAN Route 3 or 25  
If you have special needs, please contact RTC*

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An advisory committee to:

**Southwest Washington Regional Transportation Council**

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**Regional Transportation Advisory Committee (RTAC)  
Meeting Minutes  
October 21, 2016**

**I. Call to Order and Approval of Minutes**

The meeting of the Regional Transportation Advisory Committee was called to order on Friday, October 21, 2016, at 9:00 a.m. in the Public Service Center 6<sup>th</sup> Floor Training Room, 1300 Franklin Street, Vancouver, Washington by Bob Hart, RTC. Those in attendance follow:

|                 |                        |
|-----------------|------------------------|
| Jim Carothers   | Camas                  |
| Rob Charles     | Washougal              |
| Tony Cooper     | La Center              |
| Lynda David     | RTC                    |
| Jason Gibbens   | WSDOT                  |
| Roger Hanson    | C-TRAN                 |
| Mark Harrington | RTC                    |
| Bob Hart        | RTC                    |
| Matt Hermen     | Clark County           |
| Mark Herceg     | Battle Ground          |
| Brenda Howell   | Ridgefield             |
| Colleen Kuhn    | Human Services Council |
| Chris Malone    | Vancouver              |
| David McDevitt  | Citizen                |
| Chris Myers     | Metro                  |
| Dale Robins     | RTC                    |
| Patrick Sweeney | Vancouver              |
| Shann Westrand  | RTC                    |
| Susan Wilson    | Clark County           |
| Tim Wilson      | ODOT                   |

Bob asked if there were any changes or corrections to the September 16, 2016, meeting minutes and asked for a motion of approval.

CHRIS MALONE, CITY OF VANCOUVER, MADE A MOTION FOR APPROVAL OF THE SEPTEMBER 16, 2016, MEETING MINUTES AND TIM WILSON, ODOT, SECONDED THE MOTION AND THE MOTION PASSED UNANIMOUSLY.

**II. Comprehensive Growth Management Plans: RTC Certification - Action**

Lynda David, RTC, noted that RTC as the state-designated RTPO for the region that includes Clark County, has certain responsibilities under the state's GMA. With La Center's Comprehensive Plan being missed from last month's RTAC, RTC is seeking RTAC's recommendation to forward La Center's Plan to the RTC Board to be included with Clark County, Camas, Washougal, Battle Ground and Ridgefield's for RTC's certification action.

RTC has been receiving updated Comprehensive Plans and completed certification checklists from local jurisdictions that have taken Comprehensive Plan update actions in 2016. The City of La Center adopted their updated Comp Plan on March 23, 2016. RTAC is being asked to

recommend approval of the GMA Plan certification for the City of La Center. Following RTC Board action, a letter of certification from RTC will be sent to the local jurisdictions to complete the RTC Certification process.

There was some discussion regarding the population of Urbanized Areas (UZA's). Lynda David, RTC, explained that about 3 years after each decennial Census, the Census Bureau uses a method to determine urbanized areas based on population. Since the 2010 Census, the City of Ridgefield has surpassed 5,000 in population and will therefore become part of the UZA following the 2010 Census. La Center has not yet reached the 5,000 threshold population. There could be an impact on TIP Funding as more areas will be competing for the urban share of funding.

MATT HERMEN, CLARK COUNTY, MADE A MOTION TO RECOMMEND THE GMA PLAN FOR THE CITY OF LA CENTER BE FORWARDED TO THE RTC BOARD FOR RTC CERTIFICATION, SECONDED BY JIM CAROTHERS, CITY OF CAMAS AND PASSED UNANIMOUSLY.

### **III. Public Participation Plan Update, Action**

Lynda David, RTC, emphasized that Public Participation is an important part of the regional transportation decision-making process carried out by RTC and is required by both federal and state laws. Lynda provided a Draft of the Public Participation Plan (PPP) for RTAC review and noted that back in August RTAC made the decision to forward the draft Plan to the RTC Board with the recommendation the Board approve its release for a mandatory 45-day public comment period.

Specific changes in the 2016 draft update include: reference to the current federal transportation act, Fixing America's Surface Transportation Act – the FAST Act; updated electronic hyperlinks; and a new section on page 42 addresses the linkage between RTC's Transportation Improvement Program (TIP) and C-TRAN's Program of Projects (POP). Description of C-TRAN's reliance on RTC's public participation process is needed to satisfy the Federal Transit Administration requirements regarding the transit agency's POP. There have been no changes to the Draft Plan since RTAC last reviewed it in August.

In addition to updating the PPP, RTC has recently been working to review and make minor updates to plans associated with the Public Participation Plan. These include Title VI and the Limited English Proficiency Plans. Mark Harrington, RTC, gave a brief overview of these and explained that the Plan updates are mainly to data and maps included in the Plans. There was some discussion amongst the group about translation options. Mark Harrington, RTC, went over the types of translation services, including the Telelanguage, service RTC uses.

ROGER HANSON, C-TRAN, MADE A MOTION TO RECOMMEND ADOPTION OF RTC'S UPDATED PUBLIC PARTICIPATION PLAN AND RELATED TITLE VI AND LEP PLANS BY THE RTC BOARD AT THE BOARD'S NOVEMBER 1<sup>ST</sup>, 2016 MEETING. SUSAN WILSON, CLARK COUNTY, SECONDED THE MOTION AND THE MOTION PASSED UNANIMOUSLY.

#### **IV. Westside Mobility Strategy Project Presentation: Patrick Sweeney, City of Vancouver.**

Patrick Sweeney, City of Vancouver, gave a presentation on the Westside Mobility Strategy. The Vancouver City Council adopted the Westside Mobility Study in July. The area includes essentially everything West of I-5. With the higher costs in Portland and with Vancouver having a grid very similar to downtown Portland developers and investors are looking at the Vancouver area. Patrick went over some of the phases of the planning process. During the planning process, community engagement included stakeholder interviews, neighborhood meetings, forums and community walk & bike rides. All major public meetings were recorded by CVTV so that anyone not able to attend in person could watch online. Existing conditions data were collected and compiled to help plan for future conditions. The findings and implications reflect four community values representing what many west side residents, employees and business owners believe is most important to improve mobility with a balance between: 1) Safety, 2) Reliability, 3) Connectivity and 4) Vitality.

The City's study determined eight Mobility Goals: 1) Creating a systematic plan to increase safety, 2) Manage arterials to preserve neighborhood livability, 3) Develop efficient and reliable freight routes, 4) Retrofit Main Street to promote vitality and safety, 5) Complete key connections in the bikeway network, 6) Make walking safe and convenient for all, 7) Build partnerships to advocate for regional projects, and 8) Monitor performance of streets.

There was RTAC discussion regarding the transportation system, how to deal with funding constraints and the need to be very strategic. There was also mention of the need to update the Federal Functional Classification of some Vancouver streets as well as in Clark County which should be brought forward in 2017.

#### **V. C-TRAN Draft 2030 Plan Update: Roger Hanson, C-TRAN**

Roger Hanson, C-TRAN, went over some of the background on C-TRAN's 2030, 20-Year Transit Development Plan adopted in 2010. In the 2010 Plan, C-TRAN had assumed there would be a new Columbia River Crossing with light rail and a higher percentage of sales tax revenue, which didn't take place. The 2030 Plan update will have nothing removed but will add some explanatory text for those items that are significantly different. C-TRAN will continue to contain expenses and preserve service. Since 2010, C-TRAN has been able to move many capital projects forward, such as BRT-The Vine, a maintenance facility expansion, the Fisher's Landing Park & Ride expansion and bus replacement.

C-TRAN will reiterate support for 80% of service designed for productivity and 20% for service coverage. Growth in coverage should consider a more dynamic service delivery approach using technology not anticipated in 2010.

2016 elements of the 2030 update will include 10% service increase in the next 2 years, will identify and prioritize the next BRT corridors and, though productivity increase will mostly be in the existing service area, C-TRAN will look to innovative coverage, additional park-n-rides, increased base capacity, a rework of the Admin/Operations facility and C-TRAN will stay on top of paratransit needs. Roger Hanson said C-TRAN will focus on studies, such as the Bus On

Shoulder Feasibility Study (which RTC is currently conducting), a Mobility on Demand Project, a Park & Ride Study, BRT Corridor Study and Facilities Study that will inform a future C-TRAN 20-year Plan update likely to be published around 2020. There was discussion around the table with questions from RTAC members on current projects and a question on whether C-TRAN will be conducting an analysis of locations for an I-205 corridor park-n-ride.

## **VI. Other Business**

### **A. RTAC Members**

- a) Colleen Kuhn announced that about 20 nominations for TIB Complete Streets awards had been received by Community Transit Association Northwest (CTANW). Colleen said the process has been good and TIB is now looking at nominations.
- b) Susan Wilson announced that Clark County has adopted their 2017-2022 – 6 Year Transportation Improvement Plan.
- c) Chris Malone, City of Vancouver, wanted the group to know that WSDOT Local Programs is scrutinizing plans more thoroughly, for example, on some projects that Vancouver advertised Title VI verbiage was omitted. WSDOT made the City re-advertise those projects.
- d) Susan Wilson said that as of November 1, per new LAG rules, DBE goals will be required on signage plan contracts for contracts exceeding a certain dollar figure, Susan believed it to be \$100,000 or more.
- e) Patrick Sweeney, City of Vancouver, announced the Evergreen Highway Corridor Management Strategy was adopted by the City Council on October 17<sup>th</sup> by Ordinance. It covers the Evergreen Highway corridor from 192<sup>nd</sup> Avenue west toward Chelsea and includes the bike/pedestrian path, traffic calming and speed management to try to balance the needs of all users. Also, the City Council adopted Vancouver's Low Impact Development Standards required by the State of Washington to integrate more innovative stormwater management techniques into arterial upgrades.

### **B. RTC Staff**

- a) Dale Robins, RTC, announced there are copies of the adopted 2017-2020 TIP available at the meeting, though they are not valid until January 1, 2017.

The meeting adjourned at 10:35 a.m. The next meeting will be on Friday, November 18, 2016.



## MEMORANDUM

**TO:** Regional Transportation Advisory Committee  
**FROM:** Bob Hart  
**DATE:** November 10, 2016  
**SUBJECT:** **Bus on Shoulder Feasibility Study - Update**

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### INTRODUCTION

The RTC Board approved the Bus on Shoulder (BOS) Feasibility Study at their April 5<sup>th</sup> meeting. The study was initiated as a result of the I-205 Access and Operations study recommendations, adopted by the RTC board in November 2014 which called for evaluating the potential of bus on shoulder as a low cost option to improve transit performance, reliability, and ridership.

The purpose of the Feasibility Study is to examine the technical, operational, geometric, and policy options regarding part-time shoulder running for transit bus operations along I-205 and SR-14. This effort will culminate in findings and recommendations in regards to the viability of this transit strategy and if warranted, a recommended BOS concept within the bi-state region.

The study corridor encompasses the I-205 corridor from the 18<sup>th</sup> Street interchange, south to the I-84 interchange and on SR-14 from I-205 to 164<sup>th</sup> Avenue. (See attached map)

### PROGRESS TO DATE

The BOS Technical Advisory Committee, made up of representatives from C-TRAN, WSDOT, TriMet, ODOT and Metro have met twice since the beginning of the Study. The first meeting, in June, focused on the study purpose and goals as well as data collection needs required to support the analysis and feasibility of BOS concepts. This included roadway geometrics, traffic volumes, traffic speeds, bus specific speeds, and crash and incident history in the corridor. The next several months were spent on gathering this information and creating an inventory of available data. In addition, a consistent and comprehensive mapping system to display geometric conditions and operations data was created for the study area.

At the second meeting, in September, TAC members reviewed the information compiled and mapped for the study including travel time, bus speeds, and geometric data and also identified data gaps and determined accuracy of mapping. In addition, the committee was presented with information on the national experience with bus on shoulder projects and initial guidance on minimum conditions for a BOS project, including a preliminary look at the legal, policy, and operating parameters to support the facility.

### **BUS ON SHOULDER WORKSHOP**

RTC is hosting a bus on shoulder workshop with agency stakeholders and policy makers on December 5 and 6 at the Rose Besserman room at C-TRAN's Fisher's Landing Facility and is a key element of the study. The information developed over the summer and fall feed directly into the workshop which is split into two sessions.

Session one, on December 5, will be about three hours long and will include a broad set of participants. The audience will consist of policy and management staff and other stakeholders, such as public safety and incident management personnel, who can provide input to the discussion of bus on shoulder. The first session will focus on an educational overview of best practices around the country regarding policy, engineering, operational, and technical issues associated with BOS. The workshop will present information about existing conditions, geometrics, and characteristics in the study corridors and also include technical information on a potential pilot project on SR-14.

The second session, on December 6, will be 4 hours long and have more of an engineering emphasis. It will be made up of technical and operations staff and other stakeholders potentially affected by any proposed system. It will work to identify and discuss potential BOS concepts and associated engineering, operational and geometric issues for the candidate corridor segments with the goal of selecting a feasible BOS strategy for the study corridor.

### **PRELIMINARY BOS INFORMATION**

In preparation for the December workshop, the BOS TAC will review draft packet materials at their meeting on November 17. RTC staff will present preliminary information about SR-14 and I-205 roadway geometrics and GPS based C-TRAN bus speeds at the November 18 RTAC meeting.

### **NEXT STEPS**

RTC Board members were given an update about the study at their November meeting and "Save the Date" invitations for the workshop have been sent to the RTC Board, C-TRAN Board, TAC agency representatives, and other stakeholders

Attachment

# Bus on Shoulder Feasibility Study Area





## MEMORANDUM

**TO:** Regional Transportation Advisory Committee  
**FROM:** Lynda David  
**DATE:** November 10, 2016  
**SUBJECT:** **Transportation Performance Management: Rulemaking and Timelines**

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### INTRODUCTION

The purpose of this memorandum is to provide a status report on rulemaking and timelines for implementation of transportation performance management which began with MAP-21 (2012) and continues under the current federal transportation act, the FAST Act (2015). RTC staff last briefed RTAC on performance based planning and its use as a tool to help identify needed transportation projects, strategies and/or capital purchases at the August RTAC meeting.

### BACKGROUND

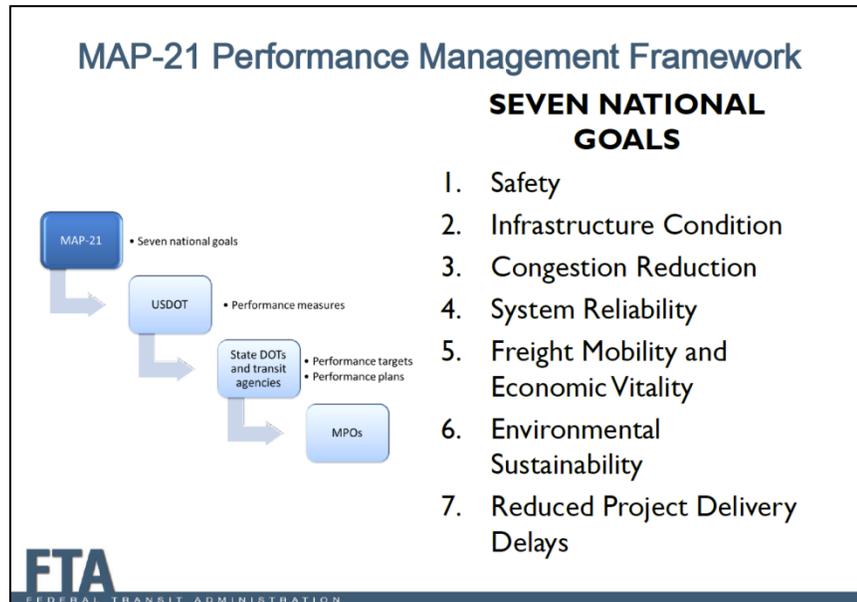
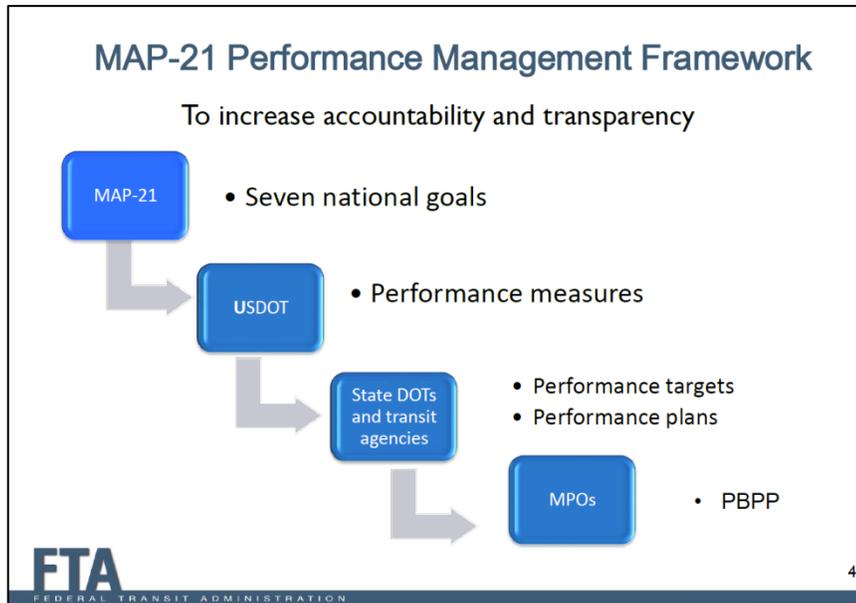
The federal transportation act, MAP-21 (2012), instituted performance driven transportation planning and decision making and these provisions were carried into the current federal transportation act, the FAST Act (2015). Following passage of MAP-21, the Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) moved forward with rulemaking on how to implement the performance provisions and the timeline for implementation.

At the August RTAC meeting, staff provided an overview of Transportation Performance Management (TPM), reviewed national goals, the federal rulemaking schedule, and focused on the final two areas of proposed rulemaking for System Performance Measures and MPO Coordination. At the November meeting, updated information will be provided

### What is Transportation Performance Management?

FHWA defines Transportation Performance Management as a strategic approach that uses system information to make investment and policy decisions to achieve national performance goals. Transportation Performance Management is systematically applied as part of a regular ongoing process. It provides key information to help decision makers understand the consequences of investment decisions across multiple markets and modes. It is aimed to improve communications between decision makers, stakeholders and the traveling public. Performance measures and targets are to be based on data and objective information and developed in cooperative partnerships.

The Federal Transit Administration's graphic summarizing the Performance Management Framework is provided below with the second graphic showing the seven national goals.



The transition to a performance and outcomes-based transportation program is designed to work toward achieving these national goals by having states and MPOs monitor and report on transportation system performance to inform the decision making process and invest resources in projects to achieve individual targets that collectively will make progress toward national goals.

## FHWA RULEMAKING

### Timeline

The timeline for FHWA’s Notice of Proposed Rule Making and Final Rule publication, to date, is provided in the table below.

| Performance Areas                                | NPRM              | Final Rule                       |
|--|-------------------|----------------------------------|
| Safety Performance Measures                      | March 11, 2014    | Published<br>March 16, 2016      |
| Highway Safety Improvement Program               | March 28, 2014    | Published<br>March 16, 2016      |
| Statewide and Metro Planning; Non-Metro Planning | June 2, 2014      | Published<br>May 27, 2016        |
| Pavement and Bridge Condition Measures           | January 5, 2015   | Anticipated<br>December 14, 2016 |
| Highway Asset Management Plan                    | February 20, 2015 | Published<br>October 24, 2016    |
| System Performance Measures                      | April 22, 2016    | Anticipated<br>December 20, 2016 |

Source: FHWA TAMP Final Rule Webinar, Nov. 9, 2016

Since the August RTC meeting, the final rule covering the Highway Asset Management Plan was published on October 24. FHWA has provided a summary fact sheet describing the requirements for Asset Management Plans and Processes per the Final Rulemaking (see attached).

## FTA RULEMAKING

### Timeline

The Federal Transit Administration has also issued Notice of Proposed Rule Making and Final Rules for transit component pieces of the performance management process (see timeline below).

| U.S. Department of Transportation<br>Federal Highway Administration<br>Federal Transit Administration |                    | TRANSPORTATION<br>PLANNING<br>INFORMATION<br>EXCHANGE |                        |
|---|--------------------|---|------------------------|
| <b>FTA Performance Management Rulemaking Schedule</b>   |                    |   |                        |
| Performance Area  | NPRM               | Comments Due  | Final Rule             |
| Statewide and Metro Planning; Non-Metro Planning  | June 2, 2014       | <u>Closed</u> October 2, 2014                         | Published May 27, 2016 |
| Public Transportation Safety Program  | August 14, 2015    | <u>Closed</u> October 13, 2015                        | Under Development      |
| National Public Transportation Safety Plan  | February 5, 2016   | <u>Closed</u> April 5, 2016                           | Under Development      |
| Public Transportation Agency Safety Plan  | February 5, 2016   | <u>Closed</u> April 5, 2016                           | Under Development      |
| Transit Asset Management Plan   | September 30, 2015 | <u>Closed</u> November 30, 2015                       | Under Development      |

 **THE PLANNING EXCHANGE** 8

WSDOT has recently issued an updated folio on Transit Asset Management (see attached) as well as summary notes on the status of both the transit safety and asset management components (see attached).

## RTC and WSDOT: COORDINATION AND COLLABORATION

RTC is currently collaborating closely with WSDOT on performance management. RTC staff participate in meetings of the MAP-21 Target Setting Working Group and RTC's Director participates in quarterly WSDOT meetings. WSDOT regularly updates its timeline for work on implementing the federally-required performance management process (see attached).

## **RTC and METRO: COORDINATION AND COLLABORATION**

RTC is also coordinating with Metro as Metro develops performance measures to be incorporated into its 2018 Metropolitan Transportation Plan update. Metro provides updated information on these work efforts on its website at: <http://www.oregonmetro.gov/public-projects/2018-regional-transportation-plan/performance>

## **NOTICE OF PROPOSED RULE MAKING ON MPO COORDINATION**

At the August RTC meeting, staff spoke of the Notice of Proposed Rule Making on MPO Coordination and Planning Area Reform and of work with the RTC Board to draft a comments letter to submit to the docket. Proposed changes would impact RTC and Metro; two Metropolitan Planning Organizations (MPO's) working within one bi-state Portland-Vancouver census designated urbanized area. The proposed rulemaking would require unified transportation planning procedures for the entire region, would require that planning activities consider the entire region consistently, would require jointly established performance targets, and would require joint development of unified planning products for the entire region including a joint Regional Transportation Plan and Transportation Improvement Program. The NPRM requires consideration of merging of the two MPOs, though the Governor and MPOs retain the decision-making authority to determine whether a planning area warrants multiple MPOs. Comments were submitted by RTC by the August 26 deadline. US DOT subsequently re-opened the docket for further comments and after discussion with the RTC Board, RTC submitted a second letter of comment by the October 24 deadline. The docket received a total of 664 communications on the subject.

## **NEXT STEPS**

RTC staff will continue to learn from FHWA and FTA and work with WSDOT and Metro to implement performance based planning in our region. Work on performance based planning and target setting is expected to ramp up in 2017 and regular updates will be provided at RTAC meetings.

### **Attachments:**

1. Asset Management Plans & Processes, FACT Sheet, Final Rulemaking
2. Map-21 and Transit Asset Management, Folio, WSDOT
3. Transit Safety Rulemaking Updates (WSDOT)
4. MAP-21 Target Setting Framework Schedule (WSDOT)

### Final Rulemaking

The Federal Highway Administration (FHWA) on October 24, 2016, published its final rule on required state-approved asset management plans and processes.

Asset management is a strategic and systematic process of operating, maintaining, and improving physical assets, with a focus on engineering and economic analysis based upon quality information, to identify a structured sequence of maintenance, preservation, repair, rehabilitation, and replacement actions that will achieve and sustain a desired state of good repair over the lifecycle of the assets at minimum practicable cost.

In simple terms, asset management is a strategic process for managing physical assets in a state of good repair over their lifecycle at minimum practicable cost.

Visit [www.fhwa.dot.gov/asset/index.cfm](http://www.fhwa.dot.gov/asset/index.cfm) and [www.fhwa.dot.gov/tpm/](http://www.fhwa.dot.gov/tpm/) for resources currently available or in development, including guidance, samples, and templates.

#### Key Dates

|  |   |
|--|---|
| By April 30, 2018  | State DOTs submit initial plans describing asset management plan processes.   |
| By June 30, 2019   | State DOTs submit fully compliant asset management plans.   |
| At least every 4 years thereafter  | Updated processes submitted for recertification.  |
| Not later than August 31, 2019, and not later than July 31 in each year thereafter | Annual determination by FHWA of whether the State DOT has developed and implemented a State asset management plan consistent with this final rule.  |
| Beginning October 1, 2019, and in each fiscal year thereafter                      | If a State DOT has not developed and implemented a compliant asset management plan, the maximum Federal share on National Highway Performance Program (NHPP) projects and activities carried out by the State in that fiscal year shall be reduced to 65% for that fiscal year. |



## Minimum Plan Requirements

- Summary listing and condition description of the NHS pavements and bridges
- NHS pavements and bridges targets
- Asset management objectives and measures
- Performance gap analysis--State DOTs must include performance gaps that affect NHS pavements and bridges regardless of physical condition or ownership.
- Risk analysis
- Life-cycle planning
- Financial plan (minimum 10 years)
- Developing investment strategies

## Penalties

- ✓ The FHWA is preparing a final rule on NHS pavements and bridges performance target establishment (23 U.S.C. 150).  
If a State DOT has not developed and implemented an asset management plan consistent with requirements and has not established NHS pavements and bridges targets within 18 months of that rule's effective date, the FHWA will not approve any further projects using NHPP funds until the State has done so.  
The deadline may be extended if the FHWA determines the State has made a good-faith effort.

## Background

The final rule addresses requirements established by the Moving Ahead for Progress in the 21<sup>st</sup> Century Act (MAP-21) and reflects passage of the Fixing America's Surface Transportation (FAST) Act:

- ✓ A requirement for States to develop and implement risk-based asset management plans for the National Highway System (NHS) to improve or preserve asset condition and system performance as part of the NHPP.
- ✓ FHWA must establish minimum standards for States to use in developing and operating NHS bridge and pavement management systems to carry out the NHPP.





## Transit asset management in Washington state (cont'd)

- State Auditor's Office: Satisfy that office's requirement that WSDOT ensures the physical condition of state/federally funded assets.
- Federal Transit Administration: Satisfy federal minimum usage requirement (100 passenger service miles per week).

Asset Management Plan Recertification is due every other year in February. New transit systems are required to submit and have their plan certified by WSDOT prior to receiving state funding. In addition, an Asset Inventory Report is due annually to WSDOT by February. Asset Inventory Reports are also reported and included with the annual Transit Development Plan that is submitted to WSDOT under RCW 35.58.2795. Collectively, this information is provided to communicate transit systems six-year service plans as well as the status and state of their individual capital assets.

The transit asset management information provided to WSDOT is used in reports to the Governor's Office, the Washington State Legislature and federal agencies. The information is used to assess the condition of the public transportation fleet in Washington state, and to seek and obtain additional grant funds to maintain the fleet in a state of good repair.

In order to reduce duplication of effort, WSDOT adopted definitions that are already established and reported by the transit systems. The Federal Transit Administration requires that each state develop a Public Transportation Management System that includes an inventory of all transit systems assets in the state. All transit systems currently submit an asset inventory to WSDOT on an annual basis. For the purposes of this reporting, transit assets are defined as:

- All rolling stock vehicles
- Facilities with a replacement value of \$25,000 or more
- Other equipment with a replacement value of \$100,000 or greater

### Available Data

#### Transit fleet (rolling stock) condition:

- Number and percent of transit vehicles beyond useful life by transit agency and statewide

#### Transit fleet (rolling stock) inventory:

- Number of vehicles (by size) in the fleet by transit agency and statewide

#### Facilities inventory:

- Inventory of transit facilities by type with a value of more than \$25,000.

### For more information

For more information, contact Mike Flood, Transit Safety Oversight Manager, WSDOT Public Transportation Division  
FloodM@wsdot.wa.gov • (206) 464-1291

Transit providers must develop an inventory system to keep track of all capital investment, which includes all vehicles, equipment and facilities of their system.

### Partnerships and information resources

WSDOT continues to coordinate with and support the Washington State Transit Association – Maintenance Committee to establish standards of maintenance and safety. This committee enables transit system maintenance managers and staff to exchange information, procedures and ideas to improve the safety, reliability, efficiency and effectiveness of operations, reduce costs of maintenance, improve customer and employee comfort, protect and maximize public investment and comply with state and federal asset management requirements.

Visit these websites to learn more about transit asset management and public transportation in Washington state:

- WSDOT Public Transportation Division: [www.wsdot.wa.gov/transit/](http://www.wsdot.wa.gov/transit/)
- Washington State Transit Association (WSTA): [www.watransit.com/Pages/default.aspx](http://www.watransit.com/Pages/default.aspx)
- WSTA – Maintenance Committee: [www.watransit.com/Pages/Maintenance.aspx](http://www.watransit.com/Pages/Maintenance.aspx)
- Washington State Transit Insurance Pool: [www.wstip.org/default.aspx](http://www.wstip.org/default.aspx)

### Purpose of reporting requirements

In July 2012, the Moving Ahead for Progress in the 21st Century Act (MAP-21) became law. Included in the law was a Declaration of Policy: "Performance management will transform the Federal-aid highway program and provide a means to the most efficient investment of Federal transportation funds . . ." The primary objectives of MAP-21 are to increase the transparency and accountability of states for their investment of federal taxpayer dollars into transportation infrastructure and services nationwide, and to ensure that states invest money in transportation projects that collectively make progress toward the achievement of national goals.

**Americans with Disabilities Act (ADA) Information:** This material can be made available in an alternate format by emailing the WSDOT Diversity/ADA Affairs team at [wsdotada@wsdot.wa.gov](mailto:wsdotada@wsdot.wa.gov) or by calling toll free, 855-362-4ADA(4232). Persons who are deaf or hard of hearing may make a request by calling the Washington State Relay at 711.

**Title VI Statement to Public:** It is the Washington State Department of Transportation's (WSDOT) policy to assure that no person shall, on the grounds of race, color, national origin or sex, as provided by Title VI of the Civil Rights Act of 1964, be excluded from participation in, be denied the benefits of, or be otherwise discriminated against under any of its federally funded programs and activities. Any person who believes his/her Title VI protection has been violated, may file a complaint with WSDOT's Office of Equal Opportunity (OEO). For additional information regarding Title VI complaint procedures and/or information regarding our non-discrimination obligations, please contact OEO's Title VI Coordinator at (360) 705-7082.



## Moving Ahead for Progress in the 21st Century Act means more robust transit asset management

The Moving Ahead for Progress in the 21st Century Act (MAP-21) required the Secretary of the United States Department of Transportation to develop rules to establish a system to monitor and manage public transportation assets to improve safety and increase reliability and performance, and to establish performance measures, and the Fixing America's Surface Transportation (FAST) Act reaffirmed this requirement. On July 26, 2016, FTA published the Transit Asset Management (TAM) Final Rule. You may view the Final Rule at: <https://federalregister.gov/a/2016-16883>

### Defining Transit Asset Management and State of Good Repair

The FTA defines *Transit Asset Management* as a business model that uses the condition of assets to guide the optimal prioritization of funding of transit priorities in order to keep our transit networks in a State of Good Repair (SGR). The purpose of the TAM is to help achieve and maintain a State of Good Repair for the nation's public transportation assets. *SGR* is defined as the condition in which a capital asset is able to operate at a full level of performance. A capital asset is in a state of good repair when the asset:

- Is able to perform the designed function;
- Does not pose a known unacceptable safety risk, and
- Has recovered life cycle investments.

### Who is required to complete a Transit Asset Management Plan?

The TAM rule applies to all transit providers that are recipients or subrecipients of federal assistance under 49 U.S.C. Chapter 53 that own, operate or manage transit capital assets used in the provision of public transportation.

A Tier I provider (see chart to the right) must develop its own TAM Plan. A Tier II provider may participate in a Group Plan or opt out and develop its own TAM Plan.

### Performance Management Requirement

Asset performance is measured by asset class, which means a subgroup of capital assets within an asset category. The following table shows the distinction between what assets must be included in asset inventories and the assets for which transit providers must measure performance.

| Assets:<br><i>Only those for which agency has direct capital responsibility</i>   | Performance measures  |
|---|---|
| <b>Equipment</b><br>Non-revenue support-service and maintenance vehicles  | Percentage of vehicles met or exceeded Useful Life Benchmark  |
| <b>Rolling Stock</b><br>Revenue vehicles by mode  | Percentage of vehicles met or exceeded Useful Life Benchmark  |
| <b>Infrastructure</b><br>Only rail fixed-guideway, track, signals and systems   | Percentage of track segments with performance restrictions by class   |
| <b>Facilities</b><br>Maintenance and administrative facilities; and passenger stations (buildings) and parking facilities | Percentage of assets with condition rating below 3.0 on FTA Transit Economic Requirement Model (TERM) Scale |

**Useful Life Benchmark** (Washington state definition): The expected life cycle of a capital asset or acceptable period of use in service for a particular transit provider's operating environment.

| Tier I                                      | Tier II                                     |
|---|---|
| Operates rail                               | Subrecipient of 5311 funds                  |
| OR  | OR  |
| ≥ 101 vehicles across all fixed route modes | American Indian Tribe                       |
| OR  | OR  |
| ≥ 100 vehicles in one non-fixed route mode  | ≤ 100 vehicles across all fixed route modes |
|   | OR  |
|   | ≤ 100 vehicles in one non-fixed route mode  |



# Transit Asset Management Plan reporting requirements

Tier I providers must develop and carry out their own TAM plans. Tier II providers may develop their own plans or participate in a Group Plan, which is compiled by a Group Plan Sponsor (generally the State DOT or designated §5310 recipient).

Tier II §5307 sub-recipients are not required to be offered a Group Plan, but may participate in one if a Sponsor invites them. Each Transit Provider must designate an Accountable Executive to ensure that the necessary resources are available to carry out the TAM plan and the Transit Agency Safety Plan, regardless of whether it develops its own TAM Plan or participates in a Group Plan.

## Transit Asset Management target setting

Targets should be set by each transit provider or TAM plan sponsor for each applicable asset class for the coming year. Initial targets must be set by January 1, 2017, and then every fiscal year thereafter. It is recognized that Transit Providers may not have complete data while setting initial targets. To the extent feasible, targets should be supported by data such as the most recent condition data and reasonable financial projections for the future, but the overall end goal is to be in a system-wide SGR.

## Timeframes/Reporting

### TAM Plans

A TAM plan must be updated in its entirety at least every 4 years, and it must cover a horizon period of at least 4 years. An initial TAM plan must be completed no later than 2 years after the Final Rule effective date, October 1, 2016.



### National Transit Database

Each entity developing a TAM Plan will have to report annually to FTA's National Transit Database (NTD). This submission should include:

- 1) Projected targets for the next fiscal year,
- 2) Condition assessments and performance results; and,
- 3) A narrative report on changes in transit system conditions and the progress toward achieving previous performance targets.

### What information should be included in a Transit Asset Management Plan?

It is expected that all assets used in the provision of public transit will be included in the TAM Plan asset inventory. This includes (with the exception of equipment) assets that are owned by a third party or shared resources. The inventory must include all service vehicles, and any other owned equipment assets over \$50,000 in acquisition value. Agencies only need to include condition assessment for assets for which they have direct capital responsibility.



The inventory must include all service vehicles, and any other owned equipment assets over \$50,000 in acquisition value. Agencies only need to include condition assessment for assets for which they have direct capital responsibility.

1. **Inventory of Capital Assets:** All capital assets that a transit provider owns, operates or manages, including those acquired without FTA funds
2. **Condition Assessment:** Rating of inventoried assets, collected at individual or asset class level
3. **Decision Support Tools:** Analytical processes used to make investment prioritization
4. **Investment Prioritization:** Ranked list of proposed projects and programs ordered by year of planned implementation
5. **Transit Asset Management and State of Good Repair Policy:** Transit providers' vision, defining objectives, roles and responsibilities
6. **Implementation Strategy:** Operational level process for implementing TAM Plan
7. **List of Key Annual Activities:** Actions needed to implement TAM Plan for each year of the Plan's four-year horizon
8. **Identification of Resources:** Staff time, funding, technology requirements, etc.
9. **Evaluation Plan:** How TAM activities will be monitored, evaluated, and updated to ensure continuous improvement

Tier I & II

Tier I only

# Transit asset management in Washington state

Public transit is a vital part of Washington state's multimodal transportation system. It is a transportation option that relieves congestion, helps maximize capacity on roadways, improves air quality, reduces fuel consumption and connects people of all ages and abilities with their surrounding communities. Maintaining a transit fleet in a State of Good Repair is critical to providing a safe, reliable and comfortable environment for operators and the traveling public.

There are 31 transit agencies in the state that operate a statewide fleet of nearly 8,900 vehicles. Under the tier definition on page 1, 10 of the 31 transit providers in Washington state are Tier I providers, and the remaining 21 are Tier II providers. These agencies provided more than 229 million passenger trips annually, with more than 6.3 million of these providing trips for passengers with special transportation needs.

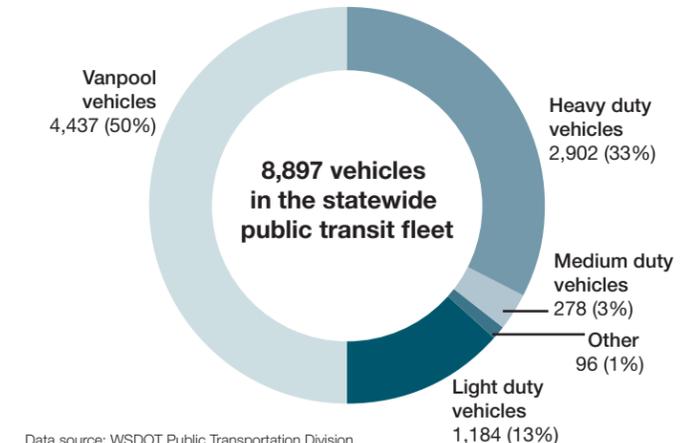
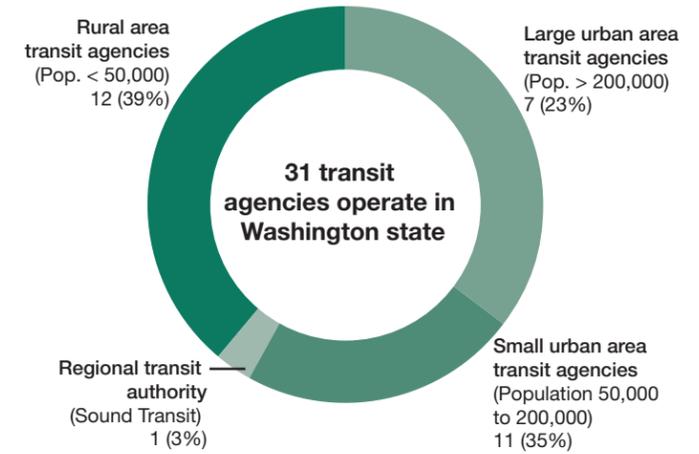
## Current Transit Asset Management Plan reporting requirements in Washington

As a condition of receiving state funds, publicly owned transit agencies were required to submit an initial asset management plan to the Washington State Transportation Commission for certification in 2005. Agencies must recertify their plan every two years in the form of a letter, verifying that the agency is still following its plan as approved by the Transportation Commission. If there are changes, the agency must identify the changes in the recertification letter and submit the updated plan to WSDOT. The plan must inventory all transportation system assets and provide a preservation plan based on lowest life-cycle cost methodologies. These specific elements make up the framework for the transit asset management plan:

- A mission statement that includes the guiding principles for asset management.
- An inventory of the transit agency's assets that includes facilities, vehicles and equipment.
- A preventative maintenance program, that includes maintenance service based on manufacturer's recommendations and adapted to local conditions, as well as a system to identify, track, and report maintenance, repair and preservation activities and costs.
- A cost model that reflects the agency's policies and standards that result in the lowest maintenance costs over the life of an asset. The cost model is to ensure that an asset is maintained at an acceptable condition, maximizing safety and useful life of an asset.
- A Warranty Recovery System (claim) – the process to recover the cost of parts and labor covered under the warranty.

WSDOT requires all transit agencies to provide an annual asset inventory report, so WSDOT can report to the following entities:

- Office of Financial Management: Ensure that state/federally funded assets are being managed and operated appropriately as originally intended in the grant for the asset's minimum useful life period.
- Continued on page 4



Data source: WSDOT Public Transportation Division.

## Reporting gaps – Current TAM requirements in Washington vs. FTA TAM requirements

| TAMP reporting requirement                 | Currently required for TAM reporting in Washington |
|--|--|
| Inventory Report System                    | Yes  |
| Lowest Life-Cycle Cost Methodologies       | Yes  |
| Graduated Preventative Maintenance Program | Yes  |
| Maintenance Recordkeeping System           | Yes  |
| State of Good Repair                       | Under development                                  |
| Performance Based Planning Process         | Under development                                  |
| Safety and Security                        | Under development                                  |

### **Part 670 Public Transportation Safety Program (Final Rule Issued)**

Final Rule posted August 11, 2016 with effective date September 12, 2016. WSDOT did not issue comments.

- Provides the overall framework for FTA to monitor, oversee, and enforce safety in the public transportation industry, as found in Federal Public Transportation law (requirements of the program were set forth in 49 U.S.C. §5329).
- Part 670 requires FTA to develop and implement a National Public Transportation Safety Plan
- Section 670.31 *Purpose and contents of the National Public Transportation Safety Plan* requires FTA to establish safety performance criteria for all modes.

### **National Public Transportation Safety Plan (Proposed plan issued)**

Proposed plan issued February 5, 2016 with comment period ended April 5, 2016. WSDOT did not issue comments. The plan includes the following sections:

- Safety vision, mission, goals
- Performance Management criteria and guidance (Chapter III, pages 37-57)
- Safety Risk Management practices and procedures
- SMS implementation guidance
- Best practices and safety plan templates
- Top Safety Priorities
- Safety Standards

#### *Summary of Chapter III (Performance Management criteria and guidance, pages 37-57)*

Safety Performance is one of two Focus Areas of the National Public Transportation Safety Plan:

- Improve Public Transportation Safety Performance
- Improve Safe Transit Access and Transit Facility Safety

For the safety performance Focus Area the safety performance criteria are:

- Fatalities (total number of reportable fatalities and rate per total unlinked passenger trips by mode)
- Injuries (total number of reportable injuries and rate per total unlinked passenger trips by mode)
- Safety Events (total number of reportable events and rate per total vehicle miles, by mode)
- System Reliability (mean distance between failures by mode)

The plan is posted to FTA's website:

[https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/National\\_Public\\_Transportation\\_Safety\\_Plan.pdf](https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/National_Public_Transportation_Safety_Plan.pdf)

### **Part 673 Public Transportation Agency Safety Plan (NPRM issued)**

NPRM issued February 5, 2016 with comments due April 5, 2016. WSDOT Transit Safety did not issue comments, encouraged transit agencies and MPOs to provide any specific comments. Few agencies submitted any comments (I know that PSRC did submit comments)

This proposed rule would require operators of public transportation systems that receive Federal financial assistance under 49 U.S.C. Chapter 53 to develop and implement Public Transportation Agency Safety Plans based on the Safety Management System approach. Development and implementation of agency safety plans will help ensure that public transportation systems are safe nationwide. The agency safety plans must include:

- Methods for identifying and evaluating safety risk
- Framework for identifying strategies for minimizing public exposure to unsafe conditions
- **Performance targets and criteria based on criteria established in the National Public Transportation Safety Plan. (Part 673.27, see detail below)**
- Requires training for personnel responsible for safety

#### §673.27

Safety assurance.

(a) *Safety assurance process.* A transit agency must develop and implement a safety assurance process, consistent with this subpart.

(b) *Safety performance monitoring and measurement.* A transit agency must establish activities to:

(1) Monitor its system for compliance with, and sufficiency of, the agency's procedures for operations and maintenance;

(2) Monitor its operations to identify hazards not identified through the Safety Risk Management process established in § 673.25 of this subpart;

(3) Monitor its operations to identify any safety risk mitigations that may be ineffective, inappropriate, or were not implemented as intended;

(4) Investigate safety events to identify causal factors; and

(5) Monitor information reported through any internal safety reporting programs.

(c) *Management of change.* (1) A transit agency must establish a process for identifying and assessing changes that may introduce new hazards or impact the transit agency's safety performance.

(2) If a transit agency determines that a change may impact its safety performance, then the transit agency must evaluate the proposed change through its Safety Risk Management process.

(d) *Continuous improvement.* (1) A transit agency must establish a process to assess its safety performance.

(2) If a transit agency identifies any deficiencies as part of its safety performance assessment, then the transit agency must develop and carry out, under the direction of the Accountable Executive, a plan to address the identified safety deficiencies.

### **Part 672 Safety Certification Training (NPRM issued)**

NPRM issued December 3, 2015 with comments due by February 1, 2016. WSDOT did not issue comments.

The NPRM proposes to adopt the current interim safety certification training provisions as the initial regulatory training requirements for public transportation industry personnel responsible for safety oversight of public transportation systems. The NPRM defines to whom the training requirements apply, describes recordkeeping requirements, provides administrative provisions, and compliance requirements.

### **Part 674 State Safety Oversight Program (Final Rule Issued)**

Final Rule issued March 16, 2016 with an Effective Date of April 15, 2016. WSDOT submitted comments to FTA.

This final rule replaces the current State Safety Oversight (SSO) Part 659, which will be rescinded by April 15, 2019. State Safety Oversight Agencies (SSOAs) and rail transit agencies (RTAs) will continue to comply with Part 659 until they come into compliance with Part 674. WSDOT has until April 15, 2019 to become certified under Part 674. FTA has been providing technical assistance for states as they work to become Part 674 certified. RCWs were updated in 2016, WACs will also require update.

### **Part 625 National Transit Asset Management (Final Rule Issued)**

Final Rule issued July 26, 2016. WSDOT submitted comments to FTA.

The TAM rule sets out minimum asset management practices for transit providers. The rule requires transit providers to create TAM plans that will help them systematically address their maintenance needs, which in turn will improve service. Well-developed asset management systems have been shown to lower long-term maintenance costs. Implementing TAM will require transit providers to collect and use asset condition data, set targets, and develop strategies to prioritize investments to meet their current goals.

The TAM rule applies to recipients and subrecipients of Chapter 53 funds who own, operate, or manage public transportation capital assets used to provide public transportation. All TAM plans must include:

- An inventory of assets
- Condition assessment of inventories assets

- Documentation of the use of a decision support tool
- A prioritization of investments

Per existing RCW, since 2005 as a condition of receiving public funds, all transit operators within Washington are already required to develop and implement a TAM plan. In many areas, the state's requirements for this plan already closely mirror the new Part 625 requirements. TAM plans must be updated to include state of good repair requirements; a performance based planning process, and safety and security policies.

WSDOT has been coordinating with the Washington State Transit Association Maintenance Committee to bring our State TAM Plan into compliance with these new Part 625 requirements.

### **Part 630 National Transit Database (Final Rule)**

Final Rule issued July 26, 2016, along with Part 625. WSDOT did not issue comments.

The purpose of Part 630 is to establish the requirements and procedures necessary for compliance with the National Transit Database Reporting System and Uniform System of Accounts, as mandated by 49 U.S.C. 5335, and to set forth the procedures for addressing a reporting entity's failure to report to the NTD.









## MEMORANDUM

**TO:** Regional Transportation Advisory Committee  
**FROM:** Mark Harrington  
**DATE:** November 10, 2016  
**SUBJECT:** **2040 Land Use Forecast and TAZ Allocation**

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### INTRODUCTION

One of the major inputs to RTC's regional travel forecasting process is future land use data, particularly the future number of households and employment in the region. For regional travel demand modeling purposes, Clark County is divided into 665 transportation analysis zones (TAZs) that each have an estimated future number of households and jobs. With the 2016 adoption of the Clark County Comprehensive Growth Management Plan update, along with a number of city's comprehensive plans, there is a need to update the future year allocation of households and employment to the region's TAZs so that the regional travel demand forecast model will be representative of current land use plans. This will ensure that transportation planning and project development work will account for all land use changes included in the updated comprehensive plan.

While Clark County's Comprehensive Plan update uses a forecast year of 2035, both RTC and Metro's upcoming regional transportation plan (RTP) updates will require a 2040 horizon year. The purpose of this agenda item is to seek RTAC's approval of a countywide 2040 forecast of households and employment and discuss the process for allocating that forecast to the region's TAZs.

### 2040 FORECAST

The proposed 2040 forecast builds upon the 2035 forecast of population and employment used in Clark County's 2016 Comprehensive Plan update. The comp plan's population forecast is based on the Washington State Office of Financial Management's (OFM) 2035 medium population forecast for Clark County of 562,207, plus an additional 15,224 persons based on existing local jurisdictions plans. The proposed 2040 population forecast uses the OFM medium 2040 forecast of 585,137 with the addition of the same 15,224 persons based on existing local jurisdiction plans - for a total of 600,361 persons (see Table 1).

For the 2016 Comprehensive Plan forecast, total households were estimated by applying a future person per household rate of 2.66 to the total population. The proposed 2040 forecast of households uses the same factor, yielding a total of 225,700 households in 2040.

The county's Comprehensive Plan uses a 2035 forecast of 232,500 total jobs. The proposed 2040 forecast takes the 2035 forecast's job to household ratio of 1.07 to estimate a 2040 employment total of 241,499, based on 225,700 households.

**Table 1:****2035 GMA and Proposed 2040 RTP Forecasts of Population, Households and Employment**

|                          | 2035 GMA | Proposed 2040 RTP | Growth |
|--------------------------|----------|-------------------|--------|
| <b>Population</b>        | 577,431  | 600,361           | 22,930 |
| <b>Households</b>        | 217,079  | 225,700           | 8,620  |
| <b>persons/household</b> | 2.66     | 2.66              |        |
| <b>Employment</b>        | 232,500  | 241,499           | 8,999  |
| <b>Jobs/household</b>    | 1.07     | 1.07              |        |

Overall, the proposed 2040 forecast extends the 2035 Comprehensive Plan forecast by five years utilizing the same growth assumptions and relationships found in the 2035 forecast.

**TAZ ALLOCATION PROCESS**

The Clark County Comprehensive Plan update process included an initial 2035 TAZ allocation of households and employment based on UGA level forecast of population along with capacity data from the county's Vacant Buildable Land Model for residential and employment land. The 2040 TAZ allocation process will build upon this existing work to allocate an additional 8,620 households and 8,999 jobs. RTC staff will collaborate with local jurisdiction land use planners to developed and review a new 2040 TAZ allocation of households and employment. The goal is to have 2040 TAZ allocation by late-January 2017 to support regional travel forecasting work by RTC and Metro.