



# MULTIMODAL TRANSPORTATION PROGRAM PROJECT APPLICATION

## Transportation Project Sponsors

### 1. Project Sponsor (must be a public agency)–REQUIRED

Organization Name:	City of Tigard		
Contact Person Name:	Mike McCarthy	Title:	Senior Project Engineer
Street Address:	13125 SW Hall Blvd	Phone:	(503) 718-2462
City, State Zip:	Tigard, OR 97223		
E-mail:	mikem@tigard-or.gov		

### 2. Co-Sponsor(s)

List the organization names for any Co-Sponsors of this project:

## Transportation Project Information

### 3. Project Name–REQUIRED

Project Name:

### 4. Project Budget Summary - This table will automatically fill in.

	Project Funds	% of Project Costs
Total Costs	\$900,000	
Non-Eligible Costs		
Total Transportation Project Cost	\$900,000	100%
Matching Funds	\$100,000	11.11%
Requested Funds	\$800,000	88.89%

### 5. Provide a brief summary of the project (max 800 characters)–REQUIRED:

Evaluate and develop a conceptual design to address the transportation issues in the area of the interchange of Highway 217 with 72nd Avenue. This project will focus on the ramp terminals, cross street (72nd Ave) and streets intersecting 72nd Ave - not on the mainline of Hwy 217.

### 6. Is this project a continuation of a previous Statewide Transportation Improvement Program (STIP) Project?

- Yes       No



# MULTIMODAL TRANSPORTATION PROGRAM PROJECT APPLICATION

If yes, describe the status of the previous STIP project.

**7. Does this project complement or enhance an existing or planned STIP project? For example, does it provide a more complete solution for an existing project or is it intended to work with another planned project, including a "Fix-It" STIP project?**

- Yes       No

If yes, describe the relationship of this proposed project to the other, including planned timing of both projects.

**8. Project Problem Statement–REQUIRED**

Provide a paragraph explaining the problem or transportation need the project will address:

Traffic volumes exceed capacity at multiple locations in the interchange area, including the ramp terminals, and are nearing capacity at other intersections along 72nd Avenue.

Side street intersections (including a signal between ramp terminals) complicate traffic flow in the interchange area.

Crashes occur frequently in the interchange area. A lack of adequate facilities hampers walking and cycling.

This interchange is the primary access point for hundreds of employers on both sides of Hwy 217. The Tigard Triangle (north of 217) is planned as a high-density employment area, but is largely undeveloped due to traffic problems and the high cost companies would need to pay to resolve them, meaning bad traffic at this interchange is keeping thousands of jobs from coming to this area.

**9. Transportation Project Location–REQUIRED**

City: <input style="width: 90%;" type="text" value="Tigard"/>	County: <input style="width: 90%;" type="text" value="Washington"/>
MPO: <input style="width: 90%;" type="text" value="Metro"/>	Special District: <input style="width: 90%;" type="text"/>

Project Location Detail: (include as appropriate: road and milepost range, rail line and milepost range, GPS coordinates, bus route and stops, bike path or multipurpose trail locations, sidewalk locations, or other location detail)

Highway 217 (Beaverton-Tigard Highway #144) at its interchange with 72nd Avenue at MP 6.92

72nd Avenue in the vicinity of Highway 217, and the streets intersecting 72nd Avenue, particularly including Hunziker Street.

**10. Maps and Plans** (Project Site and Vicinity Maps are required for all construction projects. Include other applicable maps or drawings, if available.)

<input checked="" type="radio"/> Attached/Upload <input type="radio"/> Not Applicable	Vicinity Map (8.5x11) (may be inset on site map page)
<input checked="" type="radio"/> Attached/Upload <input type="radio"/> Not Applicable	Site map/air photo (showing existing site) (8.5x11)
<input type="radio"/> Attached/Upload <input checked="" type="radio"/> Not Applicable	Site map (showing proposed construction area clearly marked) (8.5x11)
<input type="radio"/> Attached/Upload <input checked="" type="radio"/> Not Applicable	Typical Cross Section Drawings (showing proposed construction funded by the requested funds clearly marked) (8.5x11)

**11. Project Description–REQUIRED**

Clearly describe the work to be funded and describe what will be built, any services that will be provided, what equipment will be purchased, or project planning or environmental document efforts that will be paid for with Requested Funds. Include whether [Practical Design](#) considerations have been applied to the proposed project. Identify if the project can be completed in phases, and whether the project or phase will provide a complete, useful product or service. (Maximum 4000 characters)

Evaluate existing and future travel conditions in the Hwy 217 / 72nd Ave interchange area and propose conceptual designs that would address the transportation issues. Elements of this analysis would include:

Evaluate existing traffic volumes, crash data, traffic flow/capacity, roadway geometrics, adequacy of the existing pedestrian and bicyclist facilities, etc.

Analyze how this area would be affected by future traffic volume growth and buildout of the surrounding area and identify transportation issues anticipated to develop or worsen in the future. Evaluate with respect to relevant outcomes of the Southwest Corridor study.

Develop a range of conceptual alternatives (including a no-build) that would address or help address the current and anticipated transportation issues. This will include alternatives involving reconfiguration of Hunziker Street and may include reconfiguration of ramp terminals. This is not anticipated to include alternatives that would change the mainline of Hwy 217.

Evaluate these conceptual alternatives, their rough costs and design constraints, how well they would address the transportation issues, and how much they would impact the surrounding community.

Identify a few of the most promising alternatives for further study (including a no-build).



# MULTIMODAL TRANSPORTATION PROGRAM PROJECT APPLICATION

Further evaluate this shorter list of alternatives to better understand their cost, benefits and impacts.

Choose a preferred alternative and, if a build alternative is chosen, flesh it out enough (including an interchange area management plan) to be considered and programmed for detailed design and construction in a future STIP.

This is anticipated to be an 18-month study to allow adequate time for analysis, review and public involvement in the various phases of this effort. The start date would be flexible to match funding availability.

The project is somewhat scalable in that a smaller study could be conducted for less money and still yield beneficial results. However, the amount applied for is what is believed to be necessary to develop the project in sufficient detail to accurately program design and construction in a future STIP.

Any build options would be designed in accordance with practical design principles.

## 12. Primary Project Mode(s)

<input type="checkbox"/> Passenger Rail	<input type="checkbox"/> Light Rail	<input type="checkbox"/> Bus/Transit
<input type="checkbox"/> Pedestrian	<input type="checkbox"/> Bike	<input checked="" type="checkbox"/> Highway/Road
<input type="checkbox"/> Other:		

## 13. Project Activities

<input type="checkbox"/> Infrastructure Engineering, Design, or Construction	<input checked="" type="checkbox"/> Project Planning and Development	<input type="checkbox"/> Operations/Service Delivery
<input type="checkbox"/> Capital Equipment Purchases	<input type="checkbox"/> Transportation Demand Management	<input type="checkbox"/> Other

## Timetable and Readiness Information

**14. Indicate anticipated timing for the following activities, as applicable. Provide a date, if known, or year–REQUIRED.**

Anticipated Dates	Activity
2016-18	Requested STIP Funding Year (e.g. 2016, 2017, 2018) - <b>REQUIRED</b>
	Bid Let Date
	Construction Contract Award
	Construction Complete
	Capital Equipment Purchase
	Operations/Service Begin
	Other Major Milestone: 18-month analysis and conceptual design
12/31/18	Project Completion/End of Activities funded through this request - <b>REQUIRED</b>

**15. Is the proposed project consistent with adopted plans? (Plans may include, for example, transportation plans, mode plans such as bike/ped or transit plans, economic development plans, comprehensive plans, corridor plans or facility plans.)–REQUIRED**

- Yes       No

Describe how the proposed project is consistent with adopted plans. List plans that include the project (with page numbers if possible) or describe how the project meets plan intent. If the project is not consistent, explain how and when plans will be amended to include the project.

This project is specifically listed in the Tigard Transportation System Plan and Metro's Regional Transportation Plan, and is consistent with the Oregon Highway Plan.

**16. Is the proposed Transportation Project consistent with Major Improvement Policies including [OTP Strategy 1.1.4](#) and [OHP Action 1G.1](#)?–REQUIRED**

- Yes       No

Describe how the proposed investment is consistent with OTP Strategy 1.1 and for highway projects, OHP Action 1G.1. If the project corresponds to a later priority in these strategies, describe how higher priority solutions have already been tried or why they are not applicable or not appropriate to the location.

The policies of OTP Strategy 1.1.4 and OHP Action 1G.1 would be guiding principles for this study and would give preference to smaller, higher priority solutions over larger, lower priority solutions.

## Project Benefit Information

Questions 17 through 26: Describe how the proposed solution will help achieve the outcomes listed below. Describe the benefits that the proposed solution is expected to achieve and provide documentation of those benefits where available, such as summaries of data analysis or modeling results, or letters of commitment from participants or employers. Where appropriate, also include in the description whether the proposal will mitigate or prevent a negative impact to the desired outcome.

This information and information throughout the application will be used as input to the STIP decision process. It is not expected that every solution will help achieve every benefit. Different types of solutions are likely to have different kinds of benefits and no type of solution or benefit is assumed to be more important than others. Please provide a realistic description of expected benefits of the proposed solution and feel free to use N/A where the benefit or outcome listed does not apply to the proposal.

### 17. Benefits to State-Owned Facilities

Outcome sought: preserve public investment by maintaining efficient operation of state-owned highways and other facilities through operational improvements, local connectivity, congestion-reducing projects and activities, etc.

For example, will the solution:

- Provide an alternative to travel on state owned facilities?
- Cost less than a state facility improvement with equal benefits?
- Include local efforts to protect the investment such as an Interchange Area Management Plan?
- Plan for or contribute to development of a seamless multimodal transportation system?
- Complete or extend a critical system or modal link?

This interchange area is under state jurisdiction. Potential construction solutions could significantly improve the current and future traffic flow and safety in this area and maintain the viability of this important connection to Highway 217, preserving the effectiveness of the state's significant investment in this part of the transportation network.

Any build option would be anticipated to include sidewalks, bike lanes, and transit stop amenities throughout the newly constructed facilities, which would be a significant improvement over the existing pedestrian, bicycle and transit stop facilities in this area.

## 18. Mobility

Outcome sought: provide mobility for all transportation system users and a balanced, efficient, cost-effective and integrated multimodal transportation system.

For example, will the solution:

- Improve or better integrate passenger or freight facilities and connections, including multimodal connections, to expedite travel and provide travel options?
- Improve or provide a critical link in the transportation system or connection between modes for travelers or goods?

Construction options would be designed to alleviate significant congestion that occurs on this Arterial Freight Route which is a key access point to Highway 217, which is a Statewide Highway and Oregon Freight Route. If left unaddressed, this congestion would likely cause backups onto the mainline of 217 in the near future.

The hundreds of companies in the 72nd Ave area truck in significant amounts of raw materials and truck out significant amounts of finished products. Truckers are hindered by the many curves and corners, tight spaces, confusing configuration and poor traffic flow in this interchange area. Improving this interchange area will open another door for business in this part of Oregon.

Congestion delays occur at various times throughout the day, affecting freight haulers' schedules. Improvements at this interchange would improve travel time reliability for shippers.

The lack of sidewalks, bike lanes and transit stop facilities in the interchange area keeps people from walking or cycling, or riding the bus through this area, further adding to the traffic volume.

There are only a few crossings of the freeway system in this area, and most (such as 72nd Ave, Hwy 99W, Bonita Rd, Boones Ferry Rd, Greenburg Rd, Scholls Ferry Rd, etc.) have significant congestion especially during peak hours, making the freeway system a barrier to travel during congested times. Improvements to this interchange would improve this option for people crossing the freeway system.

## 19. Accessibility

Outcome sought: ensure appropriate access to all areas with connectivity among modes and places and enable travelers and shippers to reach and use various modes with ease.

For example, will the solution:

- Improve connections within residential areas and/or to schools, services, transit stops, activity centers and open spaces, such as by filling a gap in bicycle, pedestrian, or transit facilities?
- Improve or expand access to employers, businesses, labor sources, goods or services?
- Plan for or contribute to expanding transportation choices for all Oregonians?

There are thousands of jobs in close proximity to this interchange, and new employers would likely locate here and bring thousands more jobs if this interchange is improved. Build options would be designed to facilitate vehicular, pedestrian, bike and transit access to and from these employers.

The existing lack of pedestrian and bike facilities result in many people choosing to drive (rather than walk or bike) when they would choose to walk or bike if adequate facilities existed in this area.

While some of the sidewalks and ramps meet current standards, many other locations in this area are barriers to those with disabilities. Any build option chosen would be constructed in accordance with ADA standards to remove those barriers.

## 20. Economic Vitality

Outcome sought: expand and diversify Oregon's economy by efficiently transporting people, goods, services and information.

For example, will the solution:

- Support, preserve, or create long-term jobs and capital investment? Will it do so in an economically distressed area?
- Enhance opportunities for tourism and recreation?
- Plan for or contribute to linking workers to jobs?

There are hundreds of current employers and thousands of existing jobs in this area. The Tigard Triangle area (to the north of Hwy 217) is planned as a high-density employment area, with tens of thousands of new jobs to provide employment for people throughout the region. However, due to traffic problems in this area and at other locations along state highways, there is very little available capacity for trips to and from new employers in the Tigard Triangle and much of this area is undeveloped or underdeveloped.

Companies considering locating here face many requirements for expensive and undefined transportation improvements. The prospect of spending millions of dollars on off-site transportation improvements drives many of these employers elsewhere and their jobs out of the area. The transportation problems in this Hwy 217/72nd Ave interchange area are costing this area thousands of jobs.

## 21. Environmental Stewardship

Outcome sought: provide an environmentally responsible transportation system that does not compromise the ability of future generations to meet their needs and encourage conservation of natural resources.

For example, will the solution:

- Use design, materials or techniques that will more than meet minimum environmental requirements or mitigate an existing environmental problem in the area?
- Help meet air or water quality, energy or natural resource conservation, greenhouse gas reduction or similar goals?
- Plan for or contribute to the use of sustainable energy sources for transportation?

Traffic congestion in this interchange area results in hundreds of additional hours of vehicles idling per day, with resulting vehicle emissions and their resultant effects on air, energy and greenhouse gas goals. This project would evaluate options to reduce those emissions.

Providing pedestrian, bike and transit stop facilities through the interchange area would facilitate use of those modes, giving people the option of reducing their carbon footprint.

## 22. Land Use and Growth Management

Outcome sought: support existing land use plans and encourage development of compact communities and neighborhoods that integrate land uses to help make short trips, transit, walking and biking feasible.

For example, will the solution plan for or contribute to:

- Efficient development and use of land as designated by comprehensive or other land use plans?
- Community revitalization including downtowns, economic centers and main streets?
- Compact urban development and mixed land uses?

The Tigard Triangle is planned as a high-density employment area, including a mix of other uses. However, when developers have proposed high-density buildings, they have received discouraging news about the lack of vehicular capacity through this interchange to their development, and a nebulous notion of millions of dollars in off-site improvements in order to meet the regulatory requirements necessary to construct those dense developments. Few have chosen to move ahead. The result has been many low-density 'home-conversion' business uses instead of the high-density employment planned.

### 23. Livability

Outcome sought: promote solutions that fit the community and physical setting, enable healthy communities and serve and respond to the scenic, aesthetic, historic, cultural and environmental resources.

For example, will the solution:

- Enhance or serve unique characteristics of the community?
- Use context sensitive principles in design and minimize impacts on the built and natural environment?
- Encourage a healthy lifestyle and enable active transportation by enhancing biking and walking networks and connections to community destinations or public transit stops or stations?
- Include elements that will make the facility or service more attractive, enjoyable, comfortable or convenient for potential users?

The high crash rate and regular delays (and resulting driver stress) in the interchange area have significant negative impacts on the livability of those who travel through it.

Provision of sidewalks and bike lanes through the interchange area would encourage healthy lifestyles and enable active transportation by providing adequate routes through this area that currently comprises a barrier to walking and cycling.

Any build option chosen would be designed in accordance with context-sensitive and practical design principles to minimize its impact on the surrounding community and reduce unnecessary costs.

## **24. Safety and Security**

Outcome sought: Investment improves the safety and security of the transportation system and takes into account the needs of potential users.

For example, will the solution:

- Improve safety by using designs or techniques that exceed minimum requirements for safety and are likely to reduce the frequency or severity of crashes?
- Help reduce crashes involving vulnerable road users such as bicyclists and pedestrians?
- Improve the ability to respond to an emergency and quickly recover use of the facility or service?

2007-10 state crash data shows 64 recorded crashes in this interchange area (not counting crashes on the mainline of 217). 22 of these were injury crashes. Build options would be likely to reduce these crash rates.

The lack of sidewalks and bike lanes through the interchange area makes vulnerable users, such as pedestrians, bicyclists and people waiting for buses, more vulnerable to getting hit by vehicles. Any option considered would include sidewalks, bike lanes and transit stop amenities throughout the interchange area, providing some measure of protection for these vulnerable users.

The existing narrow bridge and regularly clogged traffic impede the ability of emergency vehicles to get through this area, which is one of only a few crossings of Hwy 217. Build options would provide more space and fewer stopped vehicles in that space, providing a clearer path for emergency vehicles.

Improvements to this interchange would keep traffic queues from extending onto the mainline of Hwy 217 and into the 217/I-5 interchange area.

## 25. Equity

Outcome sought: promote a transportation system with multiple travel choices for potential users and fairly share benefits and burdens among Oregonians.

For example, will the solution:

- Benefit a large segment of the community?
- Benefit one or more transportation disadvantaged populations?
- Improve environmental justice or economic equity of the community or region?

Improvements to this interchange would benefit a large segment of the community because it is the main access point for them to access the freeway system. 24,000 vehicles per day enter or exit Hwy 217 via this interchange. The daily volume of traffic across the bridge is over 20,000 vehicles per day.

The addition of sidewalks, bike lanes and transit stop facilities would benefit the transportation disadvantaged people using these modes, giving them better travel choices.

This project would significantly enhance the opportunities for the transportation disadvantaged to get to potential employment.

## 26. Funding and Finance

Outcome sought: investment uses funding structures that will support a viable transportation system and are fair and fiscally responsible.

For example, will the solution:

- Have ongoing funding available for operations and maintenance?
- Support the continued use of prior investments or reduce the need for future investments?

The state, city and other partners have made an enormous investment in the regional transportation system. This project would preserve the efficiency of this system and the value of this investment by alleviating a significant bottleneck in the current transportation system.



## Budget Information

### 27. Estimated Project Costs–REQUIRED

List estimated costs for the various activities listed below, as applicable to proposed project. Shaded fields are automatically calculated.

	Enter Values in this Column	Total Column
Project Administration	\$100,000	
Staff Costs (for Service/Educational Projects)		
Project development and PE	\$800,000	
Environmental Work		
Coordination and Outreach		
Leased Space		
Building purchase and/or Right of Way		
Capital Equipment		
<b>Non-Construction Project Costs Total</b>		<b>\$900,000</b>
Utility Relocation		
Construction		
<b>Construction Project Costs Total</b>		
<b>Total Eligible Project Cost</b>		<b>\$900,000</b>
Non-Eligible Costs (other project non-transportation expenditures, e.g. un-reimbursable utilities)		

### 28. Project Participants and Contributions–REQUIRED

List expected project participants and their contributions in the table below. Begin with the amount contributed by the Sponsor and include contributions from Project Co-Sponsor and other participants, if applicable. Sponsor and participant contributions must add to at least 10.27% of Total Transportation Project Costs. This is the amount of matching funds typically required for most federal funding programs. The specific amount of matching funds required for the proposed project may be more or less than 10.27%, depending on its funding eligibility. Specific match requirements will be determined during application review.



# MULTIMODAL TRANSPORTATION PROGRAM PROJECT APPLICATION

Participant Role	Participant Name	Project Funds Contribution	Percent of Transportation Project Total Cost
Sponsor	City of Tigard	\$100,000	11%
Co-Sponsor			0%
Participant			0%
Participant			0%
<b>Total</b>		\$100,000	11%

If you have more co-sponsors and participants than lines in the table above, list their names and contribution amounts in the box below and enter the totals of Co-Sponsor and Participant contributions in the appropriate spaces in the table above.



## Submittal Approval

### 29. Project Sponsor Signature Authority Information–REQUIRED

The Authorizing Authority identified below approved the submittal of this application on behalf of the Project Sponsor. Project sponsors other than the Oregon Department of Transportation will be required to sign an Intergovernmental Agreement (IGA) with ODOT prior to receiving any project funds. The IGA with the state will detail the requirements for the use and management of requested funds.

Authorizing Authority Name:

Authorizing Authority Title:

Electronic submittal was approved by the identified authorizing individual. No signature needed if checked.

Signature:  Date:

### 30. Co-Sponsor Signature Authority Information

The signature below demonstrates support of this application on behalf of the Co-Sponsor:

Authorizing Authority Name:

Authorizing Authority Title:

Signature:  Date:

If you have more than one Co-Sponsor, list further Co-Sponsors' submittal authority names and titles in the box below and ask those named to provide their signatures and the date signed by their names.

Electronic submittal was approved by the identified authorizing individuals. No signatures needed if checked.

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 <b>TIGARD</b>	<b>ENGINEERING DIVISION PUBLIC WORKS DEPARTMENT</b>
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# HWY 217 - 72ND AVE INTERCHANGE

## Vicinity Map

<b>FIGURE</b> N/A
<b>FILE NO</b> N/A

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# HWY 217 - 72ND AVE INTERCHANGE

## Interchange Area Map

<b>FIGURE</b> N/A
<b>FILE NO</b> N/A