

City of Canby

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April 20, 2023

Mandy Putney
Oregon Department of Transportation
Via email
CC: Keith Lynch, FHWA, Kris Strickler, ODOT

RE: I-205 Toll Project Draft Environmental Assessment (EA)

Dear Ms. Putney:

The City of Canby appreciates this opportunity to provide comments addressing the EA for the I-205 Toll Project.

Although Canby is not located directly along either the I-5 or I-205 freeway corridors, our community is strategically located at a point in the regional transportation network that is directly affected by regional commute patterns. State Highway 99E traverses and bisects the heart of Canby and serves as the only major through-route surface highway between population centers along I-5 (i.e., Aurora, Hubbard, Woodburn, Salem, and points south) and the eastern metro area (i.e., Oregon City and beyond). As more and more commuters choose to work in the Portland area but live outside the metro area, Canby and its neighbors have experienced increased pressure from growth and congestion on Highway 99E. Additional congestion on 99E through Canby is both an economic and quality of life issue for our community: peak hour traffic volumes on 99E affect how our local businesses conduct their day-to-day operations and also affect the safety of residents walking and biking between neighborhoods.

Canby has a number of concerns with impacts from anticipated I-205 tolling diversion and this letter addresses them at a high level and is supported by the April 14, 2023 I-205 Toll Project Technical Report– Canby Review prepared by DKS Associates, attached and incorporated by reference. We request that EA comment responses address both this letter and the analysis gaps and lack of mitigation identified by DKS Associates memorandum.

Canby has many planning studies underway, Housing Needs Analysis, Housing Production Strategy, Housing Code Efficiency Measure Development, Economic Opportunity Analysis and 20-year Comprehensive Plan and Transportation System Plan Updates. Substantial work has been completed on the Housing Needs Analysis, Housing Production Strategy,

and Economic Opportunity Analysis (EOA) all supported by Department of Land Conversation and Development Grants. The EOA was approved by city council on April 19, 2023. We understand that the EA did not assess this body of work as it was not adopted when the EA was prepared and is not an existing condition; however, we provide this information for context of Canby's overall concern which is that traffic diversion is likely to limit needed housing and employment growth due to significant increase traffic volumes on 99E and on city streets. This is further elaborated in the DKS Associates --April 14, 2023 I-205 Toll Project Technical – Canby Review memorandum.

Our draft housing needs analysis and economic opportunity analysis work has been completed consistent with state buildable lands assessments standards and both a housing and employment urban growth boundary expansion will be needed to accommodate roughly 6,000 residents over the next 20-years along with associated employment lands. Urban growth boundary expansion for residential development is currently forecasted to be between 50 and 150 acres and roughly 450 acres of employment lands.

We realize that the EA baseline of environmental assessment was based on current adopted plans; however, we provide this information to support our request that an Environmental Impact Statement be completed for the I-205 Toll Project in place of an EA. We believe that future road capacity on city streets is directly tied to the I-205 Toll project and is foreseeable and should be considered as part of an Environmental Impact Statement. The magnitude of traffic increase from anticipated tolling diversion in the EA is significant.

We also understand that the use of an EA implies that all environmental impacts have been addressed and mitigated to the point of non-significance. There are a number of impacts that we believe have not been mitigated. We also believe that the EA does not provide analysis of diversion impacts onto city streets and this is further identified by DKS Associates. Canby, like many Oregon cities, has adopted its own level of service standards as documented in the Canby 2010 Transportation System Plan. Acknowledging impacts caused from tolling diversion onto city streets is especially important for those intersections leading to the heart of downtown Canby, including the Elm Street, Grant Street, Ivy Street, and 4th Avenue intersections with 99E.

The Ivy Street/99E intersection is predicted to fail in 2027 and with the tolling diversion impacts will almost double in intersection delay. We understand that the right-of-way constraints to this intersection restrict intersection improvements but we believe to substantiate an EA other corridor improvements to off-set this impact need to be analyzed and documented, including those at the Pine Street/99E intersection. We believe additional 99E corridor analysis should be completed to provide off-setting mitigation to substantiate approval of and EA and Record of Decision, including but not limited to analysis at additional intersections, providing queuing analysis, and presenting mitigated operations.

Canby also has concerns with the data referenced by DKS Associates and cited in their memorandum for the Redwood Street/Sequoia Parkway/99E intersection as the forecasted 2027 the intersection is expected to operate within 1 percent of the mobility target during the p.m. peak house (0.89 v/c versus the 0.90 v/c mobility target). The City provided feedback through DKS Associates to the ODOT EA team that incorrect signal timing data and other inputs were utilized for the evaluation at both signalized intersections in Canby. Once these discrepancies are corrected, the Redwood Street/Sequoia Parkway/99E intersection may require additional mitigation. In our opinion this analysis is needed to determine the full project impacts in the EA.

We believe consequential intersection failure from tolling diversion will substantially increase queuing at the Ivy Street/99E intersection and an evaluation of those impacts should be addressed and mitigated as part of the EA or preferably in an environmental impact statement. This issue was raised during the two ODOT mitigation meeting discussions but has not been addressed. We understood from those mitigation meetings that impacts from lengthened queues onto city streets were addressed but have never seen this analysis. Our overall concern is that when development review occurs for proposed development and development trips distribute to the Ivy Street/99E intersection that this may result in the need for project denial based on adopted city level of service. The City of Canby is also aware of other intersections along 99E through development review, including 4th Avenue-Pine Street and Elm Street, that are operating near their mobility target during peak periods without layering on the additional traffic from the tolling diversion.

As Ivy Street and these other noted intersections are in the center of town, most development projects will result in trips impacts. Consequential decreases in the level of service at these intersections should be fully addressed and mitigated in EA, including the impacts to nearby intersections as drivers divert around this congested segment of 99E. Resulting development project denials from tolling diversion causing city street levels of service failure is a substantial impact on both current anticipated city growth and anticipated future growth. We don't see how the EA mitigates these impacts to a point of non-significance, nor is this clearly explained in the EA.

More broadly Canby also believes that overall diversion onto the city street system needs to be evaluated to determine impact on city adopted levels of services for vehicles, and pedestrian and bicycle travel. The city streets included in the diversion assessment should include the following and others where the analyses shows that there will be significant impacts:

- Ivy Street/Canby-Marquam Highway (north-south route with an intersection at 99E that is approaching a failure of mobility standards)
- Knights Bridge/S Arndt Road/S Barlow Road (network of related east-west streets connecting Canby and Barlow to I-5)
- NE Territorial Road (east-west road increasingly used as alternative to 99E)
- Haines Road (roughly parallel to 99E, with existing safety issues where it connects to 99E)

- 13th Avenue (east-west route paralleling 99E to the south)
- Birch Street
- Holly Street
- SW Berg Parkway

We also believe that bike and pedestrian mobility impacts are understated in the EA as noted by DKS Associates and request that more analysis be provided for:

- Local pedestrian routes and safety
- Local bicycle routes and safety
- Equity impacts from creating or exacerbating physical barriers
- Impacts related to installation of intersection improvements that widen or otherwise enlarge portions of the local transportation network

Canby also requests that impact to Canby Area Transit operations be assessed for ridership and operational impacts as noted by DKS Associates—transit travel time increases by over 3 minutes during the peak hours between Canby and Oregon City.

In closing we request that further analysis be completed along with associated mitigation to truly address long term tolling impacts. Canby along with other Clackamas County jurisdictions will be living with the consequential impacts from tolling for decades and more analysis of impacts is critical to Canby's future.

Thank you for your consideration and we look forward to continuing our role as a participating agency and to engaging in future steps of this project.

Sincerely,



Mayor Brian Hodson
City of Canby

Attachment: April 14, 2023 I-205 Toll Project Technical – Canby Review prepared by DKS Associates

cc: Clackamas County Coordinating Committee (C4)
Canby City Council, ATTN Council President Traci Hensley
Canby Traffic Safety Commission, ATTN Robert Cambra, Chair
Oregon State Representative, James Hieb
Oregon State Senator, Daniel Bonham
Don Hardy, Planning Director
Ryan Potter, AICP, Planning Manager



I-205 TOLL PROJECT TECHNICAL REPORT - CANBY REVIEW

DATE: April 14th, 2023

TO: Don Hardy | City of Canby

FROM: Kevin Chewuk, Dock Rosenthal | DKS Associates

SUBJECT: Canby Regional Mobility Pricing Project Support
205 Tolling Project Environmental Assessment Review Memorandum

As requested, we have reviewed the I-205 Tolling Project Environmental Assessment (EA) and associated technical appendices¹. The following memorandum summarizes our detailed review, including reported impacts identified within Canby and specific findings on each, and other relevant issues and potential impacts of concern to the City of Canby that were not addressed within the I-205 Tolling EA.

INTERSECTIONS ANALYZED IN CANBY

The I-205 Tolling EA included 2 intersections within Canby and another just to the north of the City (at Haines Road) as part of its transportation area of potential impact (API) analysis (see Figure 1). The intersections are noted below:

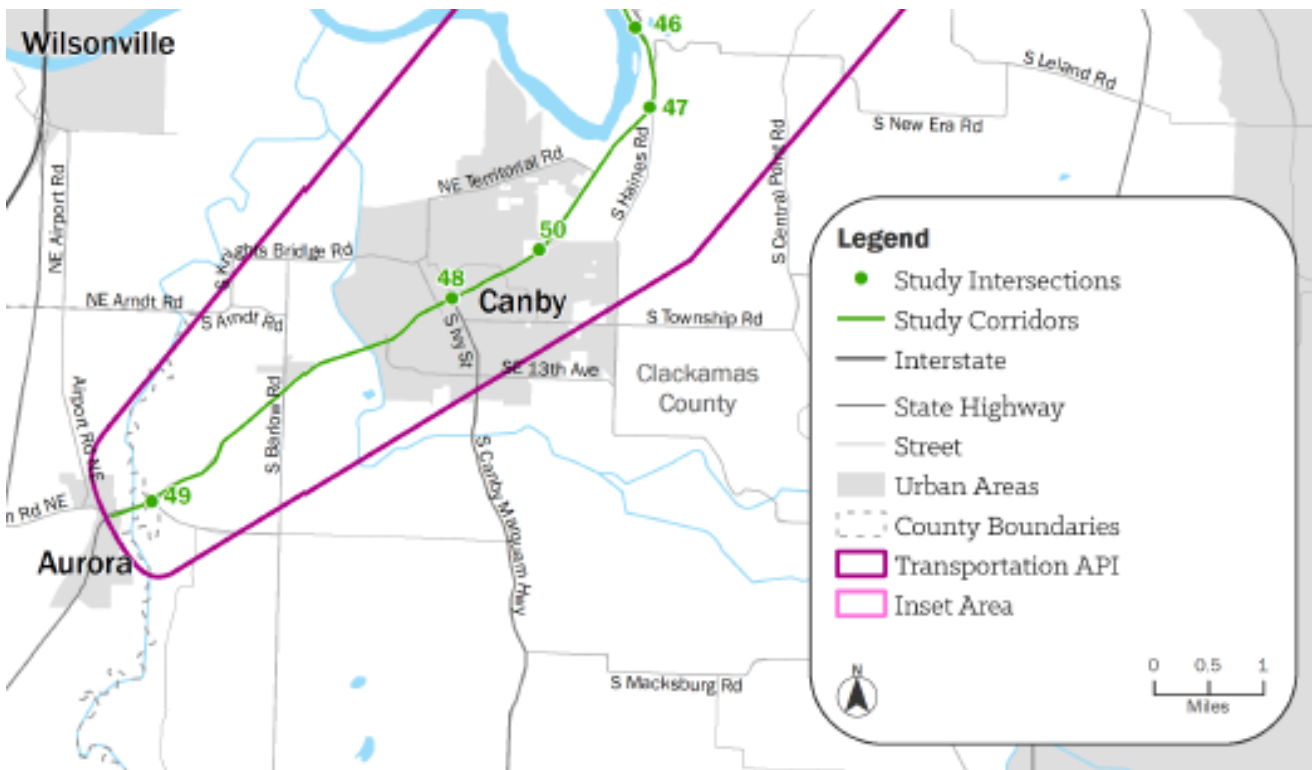
- OR 99E and S New Era Road/S Haines Road (ID #47)
- OR 99E and Ivy Street (ID #48)
- OR 99E and N Redwood Street/Sequoia Parkway (ID #50)

¹ I-205 Tolling EA, February 2023, Oregon Department of Transportation.

Findings for Canby:

While 3 intersections were analyzed in or near Canby, many were not included, especially along OR 99E through Downtown Canby. These intersections will likely be impacted by the added traffic in the Build scenario, and particularly those through Downtown Canby impacted by queuing and the potential spill back from the adjacent intersections. The I-205 Tolling EA states that "Implementation of mitigation strategies may cause secondary impacts at adjacent intersections or roadways. Secondary impacts from implementing mitigation measures may require additional avoidance, minimization, or mitigation measures. An assessment of the effects associated with mitigation will be included in the Revised EA." Additional intersections that were not analyzed in the I-205 Tolling EA that may see impacts include: OR 99E & SW Berg Parkway, OR 99E & Elm Street, OR 99E & Grant Street, OR 99E & S Pine Street/NE 4th Avenue and OR 99E & Territorial.

FIGURE 1. CANBY STUDY INTERSECTIONS INCLUDED IN THE I-205 TOLLING TRANSPORTATION API



TRAFFIC DIVERSION WITH I-205 TOLLING

Tolling on I-205 will cause many highway users to shift their trips to OR 99E and other roadways in Canby to avoid tolling. Significant increases in traffic volumes are forecasted from highway user diversion in Canby in the I-205 Tolling EA Transportation Technical Report, most notably along OR 99E and streets connecting to it, and other major streets connecting Canby to areas outside of the City, such as Knights Bridge Road and SE 13th Avenue.

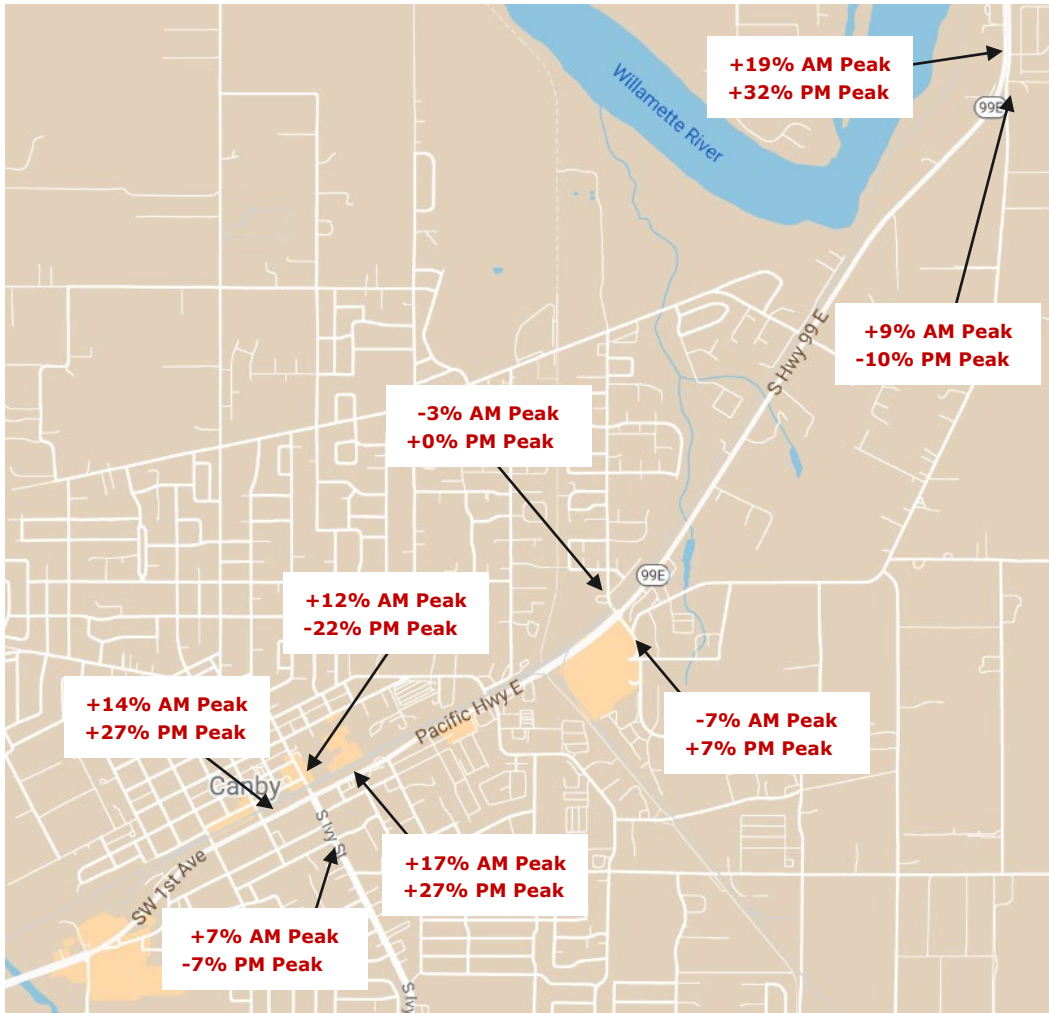
TRAFFIC DIVERSION IN 2027 WITH I-205 TOLLING

The I-205 Tolling EA Transportation Technical Report provides projected daily traffic volume changes for segments of OR 99E surrounding Canby, although it excludes the segment through downtown Canby, comparing the average weekday volumes in the 2027 Pre-Tolling and Build Scenarios to those in the 2027 No-Build Scenario. It estimates daily volume increases in 2027 from tolling diversion along OR 99E up to 24 percent in the northbound direction and up to 21 percent in the southbound direction east of Sequoia Parkway/Redwood Street, and daily volume increases along OR 99E near Lone Elder Road (between Canby and Aurora) up to 110 percent in the northbound direction and up to 93 percent in the southbound direction.

Figure 2 shows projected 2027 peak hour volume increases along studied roadway segments in Canby with I-205 tolling. As shown, increases of up to 19 percent are expected during the a.m. peak along OR 99E at the northeast part of the City, and up to 17 percent along OR 99E through Downtown Canby. On side streets approaching OR 99E, increases of up to 12 percent are expected during the a.m. peak hour.

During the p.m. peak hour, significant volume increases are projected along OR 99E in Canby (see Figure 2) when compared to 2027 conditions without I-205 tolling, most notably increasing 32 percent and 27 percent near Haines Road and Ivy Street respectively. On side streets approaching OR 99E, increased volumes are expected along Sequoia Parkway with decreasing volumes expected along Haines Road and Ivy Street.

FIGURE 2. PROJECTED PEAK HOUR VOLUME CHANGES IN 2027 WITH I-205 TOLLING COMPARED TO WITHOUT



TRAFFIC DIVERSION IN 2045 WITH I-205 TOLLING

Figure 3 shows projected changes in daily volumes between the 2045 Build Scenario and the 2045 No-build Scenario for roadway segments in Canby. As shown, daily volumes are expected to increase in 2045 from tolling diversion up to 20 percent along OR 99E at the northeast part of the City and through Downtown Canby and up to 30 percent along OR 99E at the southwest part of the City.

FIGURE 3. PROJECTED DAILY VOLUME CHANGES IN 2045 WITH I-205 TOLLING COMPARED TO WITHOUT

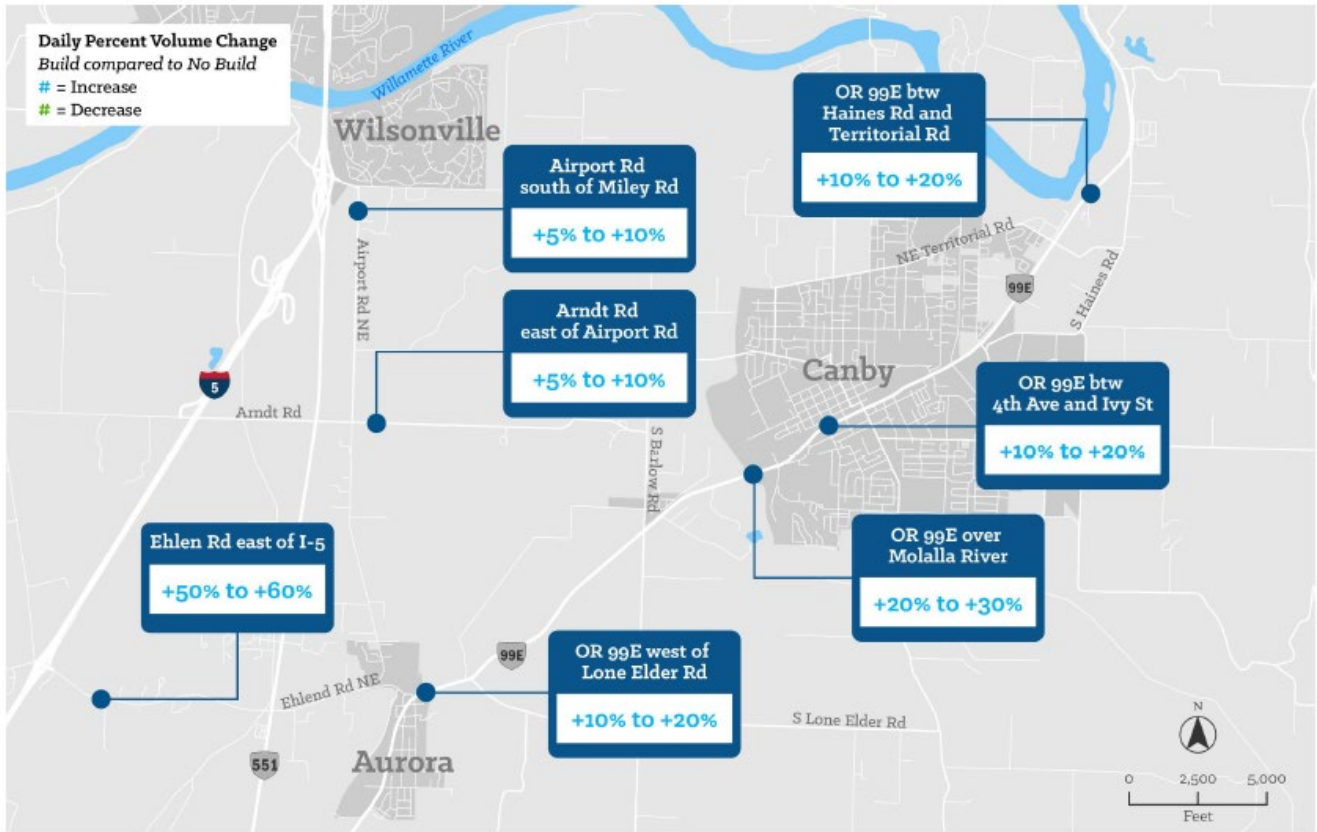
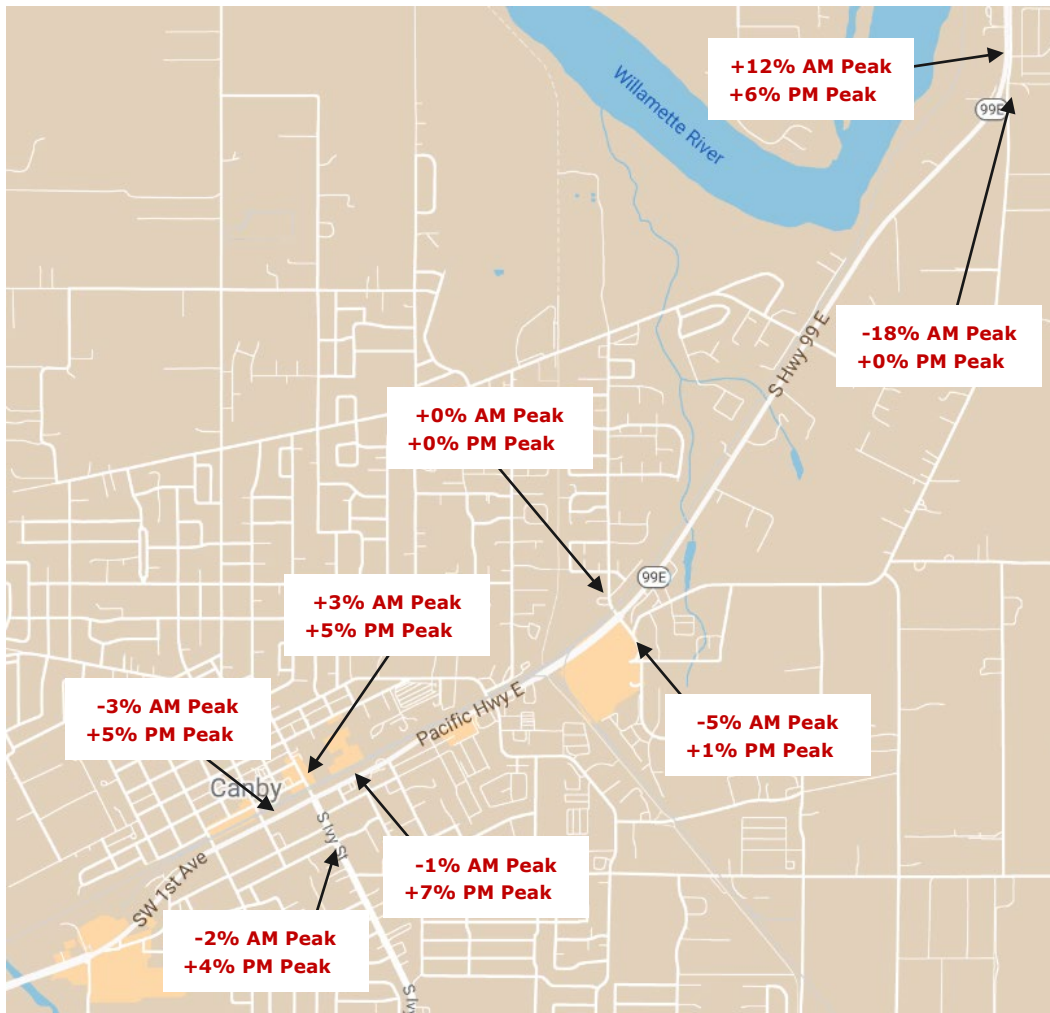


Figure 4 shows the projected 2045 peak hour volume changes along studied roadway segments in Canby with I-205 tolling. As shown, volume increases during the a.m. peak hour are projected along OR 99E at the northeast part of Canby near Haines Road, while slight decreases are projected through Downtown Canby when compared to 2045 conditions without I-205 tolling. During the p.m. peak hour, volume increases are projected along OR 99E up to 7 percent through Downtown Canby and 6 percent at the northeast part of Canby near Haines Road.

FIGURE 4. PROJECTED PEAK HOUR VOLUME CHANGES IN 2045 WITH I-205 TOLLING COMPARED TO WITHOUT



Findings for Canby:

While the roadway segments and intersections included in the I-205 Tolling EA Report do not reflect the complete picture, they do provide some insight into the projected highway user diversion impact to surface streets in Canby, indicating that I-205 tolling will increase daily and peak hour traffic along OR 99E, and along Ivy Street, Sequoia Parkway and Haines Road. This includes adding more peak hour traffic on critically congested links along OR 99E through Downtown Canby, up to 27 percent more in 2027 and up to 7 percent more in 2045.

Tolling will also significantly increase traffic along connecting streets to OR 99E in Downtown Canby, with up to 12 percent more peak hour traffic in 2027 and up to 5 percent more in 2045. It is difficult to assess the impact of these peak hour volume increases at adjacent intersections along OR 99E and other Downtown streets since the I-205 Tolling EA Report only included analysis at the Ivy Street intersection.

ROADWAY IMPACTS IDENTIFIED IN THE I-205 TOLLING EA

The forecasted analysis results from the I-205 Tolling EA for the 3 study intersections in Canby indicate that two intersections are impacted by the 2027 Build Alternative when compared to the 2027 No-Build Alternative, including the following:

- OR 99E and S New Era Road/S Haines Road (ID #47)
- OR 99E and Ivy Street (ID #48)

The reported results at the OR 99E/ N Redwood Street/Sequoia Parkway (ID #50) for 2027 also indicate that the intersection is expected to operate within 1 percent of the mobility target during the p.m. peak hour (0.89 v/c versus the 0.90 v/c mobility target). The City provided feedback to the I-205 Tolling EA project team that incorrect signal timing data and other inputs were utilized for the evaluation at both signalized intersections in Canby. Once these discrepancies are corrected, the OR 99E/ N Redwood Street/Sequoia Parkway may also be identified as a roadway impact under the Build alternative.

The 2045 results indicate that the same two intersections that were also impacted in 2027 analysis are impacted by the 2045 Build Alternative when compared to the 2045 No-Build Alternative.

Queuing results were not provided for intersections in Canby.

Findings for Canby:

Impacts were identified at two of the 3 Canby area intersections analyzed in the I-205 Tolling EA, including the OR 99E intersections with Ivy Street and Haines Road.

In addition, several noted modifications to the analysis may change the resulting volume-capacity ratios at the study intersections in Canby in the Revised I-205 Tolling EA. The reported results at the OR 99E/ N Redwood Street/Sequoia Parkway for 2027 also indicate that the intersection is expected to operate within 1 percent of the mobility target during the p.m. peak hour. The City provided feedback to the I-205 Tolling EA project team that incorrect signal timing data and other inputs were utilized for the evaluation at both signalized intersections in Canby. These changes include cycle length and coordination settings at both intersections and the split phasing at Redwood/Sequoia Parkway intersections. Additionally, the truck percentages seem to have discrepancies, with no trucks included at OR 99E & Redwood/Sequoia Parkway intersection in the existing and 2045 PM reports. In the AM existing and 2045 reports truck percentages over 100 percent are used.

Another issue is when the volume data was collected, as the volume data in Canby used for the operations analysis was not seasonally adjusted according to ODOT analysis procedures. While most of the study area and study intersections are within the Metro boundary (where seasonal fluctuations are assumed to be minor and no adjustments are assumed), those near the City of Canby are not and volumes for traffic analysis are typically seasonally adjusted to reflect the 30 HV hour. The expected seasonal adjustment from October to the peak month (typically July/August) is approximately 7 percent.

Tolling I-205 will cause many highway users to shift their trips to roadways in the City. These trips would result in significant new congestion along roadways and at intersections, and increased delay and travel times for people in the City, particularly along OR 99E and its connecting side streets through the City. Additionally, queue spill back from OR 99E intersections to the adjacent intersections are major concerns. The I-205 Tolling EA does not provide queuing analysis for intersections studied in Canby and these potential impacts to other nearby streets and intersections in Downtown Canby were not assessed.

Travel times were estimated for the 2045 No-Build and Build Alternatives along various segments of OR 99E, including the segment from Grant Street in Canby and S 2nd Street in Oregon City as shown in Figure 5. A typical trip taken today along this 8-mile OR 99E segment during the peak hour takes around 10 to 14 minutes in either direction. The 2045 Build scenario is estimated to add up to 20 seconds to the travel time along this segment when compared to the 2045 No-Build scenario, with the travel times in the southbound direction estimated to decrease during the a.m. peak hour. It is unclear why the travel times would improve in the a.m. peak under the build alternative with increased traffic volume. While the total estimated corridor travel time reported in the I-205 Tolling EA along OR 99E is reported beyond Canby, the overall increase in travel time along the segment is likely estimated to occur within the segment through Canby.

FIGURE 5: 2045 NO BUILD AND BUILD PEAK HOUR TRAVEL TIMES ALONG OR 99E



TRANSIT IMPACTS IDENTIFIED IN THE I-205 TOLLING EA

Transit travel times were estimated for the 2045 No-Build and Build Alternatives along OR 99E though Canby. The results indicate that transit travel times along OR 99E through Canby are expected to increase up to 20 seconds during the peak hours, and by over 3 minutes during the peak hours between Canby and Oregon City. The increased transit travel times along these OR 99E segments correlate to the decline in the estimated transit multimodal level of service along the segments between 11th Street and Main Street, and Railroad Avenue and S 2nd Street in Oregon City utilized by the CAT 99X route, with the former declining from C to D and the later declining from D to E. While the reported transit multimodal level of service along OR 99E through Canby did not show a decline in the I-205 Tolling EA between the No Build and Build scenarios, these segments still operate with a transit level of service of D or E.

Findings for Canby:

Transit impacts were identified along two Oregon City roadway segments analyzed in the I-205 Tolling EA utilized by the Canby Area Transit 99X route, including along OR 99E from 11th Street to Main Street (southbound) and OR 99E from Railroad Avenue to MP 12.74 (northbound). This impact was not identified in the I-205 Tolling EA.

It is also unclear if the proposed mitigations were included in the transit travel time assessment for the Build scenario. This is particularly true along OR 99E where intersection operations become significantly worse in the Build scenario when compared to the No-Build scenario, yet no change or even an improvement in transit travel times are projected along most segments.

PEDESTRIAN AND BICYCLE IMPACTS IDENTIFIED IN THE I-205 TOLLING EA

Bicycle level of traffic stress was estimated for the 2045 No-Build and Build Alternatives along OR 99E through Canby. The results indicate moderate to high stress (Bike Level of Traffic Stress 3 or 4) for bicyclists along OR 99E. The results also indicate no change in the expected level of stress for bicyclists along this segment between the 2045 No-Build and Build scenarios. Bicycle level of traffic stress was not analyzed along any other streets or intersections in Canby in the I-205 Tolling EA, although bicyclist will likely experience increased stress levels along it given the significant increase in traffic expected in Downtown Canby in the Build scenarios when compared to the No-Build.

A pedestrian corridor multimodal level of service analysis was also completed for the 2045 No-Build and Build Alternatives along the same OR 99E segments in Canby as the bicycle level of stress analysis. The results indicate a pedestrian level of service ranging from C to E along OR 99E. Again, the results indicate no change in the expected pedestrian level of service along these segments between the 2045 No-Build and Build scenarios. Again, pedestrian analysis was not analyzed along any other streets or intersections in Canby in the I-205 Tolling EA, although pedestrians will likely experience increased stress levels, particularly at intersections, given the significant increase in traffic expected in Downtown Canby in the Build scenarios when compared to the No-Build.

Findings for Canby:

No bicycle impacts were identified in Canby in the I-205 Tolling EA, although several of the analyzed roadway segments include high levels of traffic stress for bicyclists in both the 2045 No-Build and Build scenarios. OR 99E lacks bike facilities through much of Canby. The bikeway gap along OR 99E is one of the most critical in the City, with high levels of traffic stress experienced by these users. The increased traffic along OR 99E with the Build scenario will further exacerbate the high bicycle level of traffic stress along this corridor and could deter people from biking.

No pedestrian impacts were identified in the I-205 Tolling EA, although several of the analyzed roadway segments include a high pedestrian level of service. Existing sidewalks along OR 99E are narrow and often directly adjacent to the travel lane with no buffer provided. Additionally, segments of OR 99E exist with no sidewalk coverage. Adding additional traffic with the Build scenario to these already heavily traveled lanes, coupled with the high travel speeds, will negatively impact those walking along OR 99E and between the nearby neighborhoods. This will lead to uncomfortable walking conditions and a high level of stress, and difficult street crossings for some of the most vulnerable users in the City.

Although not analyzed in the I-205 Tolling EA, additional streets in the City could see increases in the level of traffic stress experienced for bicyclists and worsening pedestrian level of service as the level of traffic increases in the Build scenario, especially along streets approaching OR 99E and other streets in Downtown Canby.

TRUCK FREIGHT IMPACTS IDENTIFIED IN THE I-205 TOLLING EA

The I-205 Tolling EA does not include a metric for identifying an impact to truck freight. Freight corridor travel times were estimated for the 2045 No-Build and Build Alternatives along OR 99E between Canby and Oregon City. The results indicate that freight corridor travel times along OR 99E during the peak period are expected to increase up to 34 percent (over 3 minutes) between Grant Street in Canby and Arlington Street just north of Oregon City.

Findings for Canby:

The I-205 Tolling EA does not include a metric for identifying an impact to truck freight. The added vehicle traffic along OR 99E under the Build scenario will lead to increased freight corridor travel times during the peak periods of up to 3 minutes between Canby and Oregon City. Additionally, the added traffic in Downtown Canby will make it more difficult to access area businesses and will affect how local businesses conduct their day-to-day operations.

TRANSPORTATION SAFETY IMPACTS IDENTIFIED IN THE I-205 TOLLING EA

A transportation safety impact was identified along the OR 99E segment from Redwood Street-Sequoia Parkway to Ivy Street through Canby. This segment is estimated in the I-205 Tolling EA to see an increase in the predicted number of fatality/severe injury crashes per year in the Build scenario when compared to the No-Build scenario. A safety impact was also identified at the OR 99E/Ivy Street intersection.

Although not characterized as a transportation safety impact in the I-205 Tolling EA, the increased traffic along streets in the City will have additional negative impacts on the safety of all transportation users. Peak-hour traffic volumes affect the safety of residents walking and biking between neighborhoods and those attempting to cross streets. The higher traffic volumes and increased congestion is estimated in the I-205 Tolling EA to lead to an increase in the predictive number of crashes at intersections and roadway segments in Canby. They also create an increase in the predicted number of pedestrian and bicycle collisions in the I-205 Tolling EA with more potential conflicts between people walking and biking and those driving in the City.

Additionally, vehicle queues from OR 99E intersections extending back to the adjacent intersections will negatively impact the safety of users attempting to cross these intersections.

Findings for Canby:

A transportation safety impact was identified along the OR 99E segment from Redwood Street-Sequoia Parkway to Ivy Street and at the OR 99E/Ivy Street intersection.

Although not characterized as a transportation safety impact in the I-205 Tolling EA, the increased traffic along streets in the City will have additional negative impacts on the safety of all transportation users, including vehicle queues from OR 99E intersections extending back to the adjacent intersections negatively impacting the safety of users attempting to cross these intersections.

MITIGATIONS FOR IMPACTS IDENTIFIED IN THE I-205 TOLLING EA

The following sections provide a summary of the mitigations recommended in the I-205 Tolling EA to address the Build scenario impacts identified in Canby. These identified impacts are summarized below:

- Roadway impacts were identified at six intersections, including:
 - OR 99E and S New Era Road/S Haines Road (ID #47)
 - OR 99E and Ivy Street (ID #48)
- Transit impacts were identified along roadway segments utilized by Canby Area Transit Route 99X in Oregon City, including:

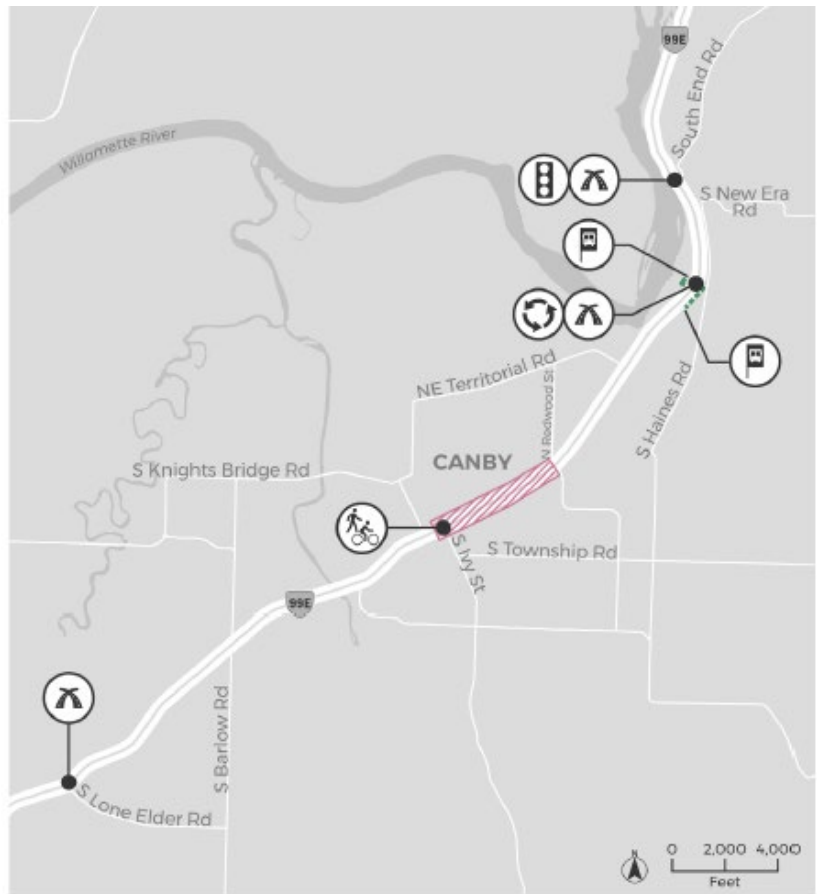
- OR 99E from 11th Street to Main Street (southbound)
- OR 99E from Railroad Avenue to MP 12.74 (northbound)
- A transportation safety impact was identified along the OR 99E segment from Redwood Street-Sequoia Parkway to Ivy Street and at the OR 99E/Ivy Street intersection.

Figure 6 summarizes the proposed mitigations in Canby for these identified impacts.

FIGURE 6: PROPOSED MITIGATIONS IN CANBY FOR IMPACTS IDENTIFIED IN THE I-205 TOLLING EA

OR 99E CANBY

- **Add Sidewalk and Crosswalk:**
Sidewalk between bus stops
-  **Safety Improvements**
-  **Proposed New Traffic Signal**
(pending signal warrant)
-  **Convert to Roundabout**
-  **Bus Stop Improvements**
-  **Bike/Ped Improvements:**
at OR 99E and S Ivy St
 - More prominent crosswalk markings *(pending engineering study)*
 - Add green dashed bike crossing markings
-  **Intersection Improvements**
 - OR 99E/South End Rd**
 - Add traffic signal *(pending signal warrant)*
 - Add SB thru lane
 - Add NB right-turn lane
 - OR 99E/Haines Rd/New Era Rd**
 - Provide roundabout
 - OR 99E/Lone Elder Rd**
 - Square up existing skewed approach
 - Provide SB refuge lane for WB left-turns



OR 99E AND IVT ST (ID #48)

The OR 99E/ Ivy Street intersection is projected to see significant increases in daily and peak hour traffic in the 2027 Build Scenario compared to the No-Build scenario. The increased traffic causes the intersection to exceed the mobility standard in the peak hour of the 2027 Build scenario. Additionally, this segment of OR 99E is estimated to see an increase in the predicted number of fatality/severe injury crashes per year due to the increased traffic. No mitigation is recommended

in the I-205 Tolling EA at this intersection (see Table 1) for the roadway impact, outside of a note to consider improvements at the OR 99E/Pine Street intersection.

TABLE 1: PROPOSED MITIGATIONS AT OR 99E/ IVY ST INTERSECTION IN THE I-205 TOLLING EA

MITIGATION TYPE	IMPACTS IDENTIFIED IN THE I-205 TOLLING EA	PROPOSED MITIGATION IN THE I-205 TOLLING EA
ROADWAY	Intersection operations exceed the mobility standard	Consider operational improvements at OR 99E and Pine St to facilitate more traffic use of that intersection to reach downtown Canby, thereby alleviating some traffic impact at Ivy St.
TRANSIT	None	None
PEDESTRIAN	None	Provide more prominent crosswalk markings; Add green dashed bike crossing markings across OR 99E.
BICYCLE	None	
TRANSPORTATION SAFETY	Increase in predicted number of fatality/severe injury crashes per year	Add 3-inch yellow reflective sheeting to signal backplates and a hardened centerline.

OR 99E AND HAINES ROAD (ID #47)

The OR 99E/ Haines Road intersection is projected to exceed the mobility standard in the peak hours of both the 2027 and 2045 No-Build scenarios and this mobility standard exceedance is expected to worsen under the Build scenarios. Recommended mitigations are shown in Table 2 and include installing a roundabout, in addition some transit enhancements.

TABLE 2: PROPOSED MITIGATIONS AT OR 99E/ HAINES ROAD INTERSECTION IN THE I-205 TOLLING EA

MITIGATION TYPE	IMPACTS IDENTIFIED IN THE I-205 TOLLING EA	PROPOSED MITIGATION IN THE I-205 TOLLING EA
ROADWAY	Intersection operations exceed the mobility standard	Install a roundabout.
TRANSIT	None	Install landing pads at bus stops (i.e., paved area at the bus stop where passengers board or exit the bus), crosswalks with RRFB to facilitate crossing of OR 99E and extend sidewalks to New Era Rd.
PEDESTRIAN	None	Install crosswalks and RRFBs to improve pedestrian access to bus stops and safety for crossing/
BICYCLE	None	
TRANSPORTATION SAFETY	None	None

Findings for Canby:

While improvements at the OR 99E/Pine Street intersections are supported by Canby to help mitigate some of the identified Build scenario impacts along OR 99E in Canby, it does not adequately address the impacts at OR 99E & Ivy Street. Given the intersection is over capacity it is reasonable to expect some local diversion through City streets parallel to OR 99E. The distribution of the added Build scenario traffic through Downtown Canby streets is unclear given the lack of intersection analysis in the I-205 Tolling EA. Peak hour volume data from the study intersections indicate significant increases are expected with the Build scenarios and the impact that it is projected to have along adjacent roadway segments and at intersections is not documented in the I-205 Tolling EA.

Additionally, the note to “Consider operational improvements at OR 99E and Pine St” is unclear, and any process recommended in the I-205 Tolling EA for identifying and implementing an unknown mitigation should be clarified.

It is also unclear how the significant levels of congestion reported at the OR 99E/ Ivy Street impacts adjacent intersections since queuing analysis was not provided for intersections in Canby. The mitigated operational results were also not reported in the I-205 Tolling EA or provided in the appendices, so it is unclear how the proposed mitigations impact operations.

There are some changes needed in the analysis to ensure results reflect accurate impacts of the project. Even with the analysis included in the I-205 Tolling EA the missing intersections in Downtown Canby that were not studied could be omitting potential impacts of the Build alternative. For example, field observations in July 2022 showed that even with the updated signal timing, segments of OR 99E from Elm to Ivy were at capacity in the peak periods and queues were regularly filling the available storage. While the analysis at the OR 99E/ Ivy Street intersection shows that traffic operations will exceed mobility targets in the future alternatives there are other impacts to the system, such as queue spillback and local diversion, that are not captured by Highway Capacity Manual methodology alone.