



Tolling Options Considered for Newberg-Dundee Bypass Project

Tolls are widely used in the United States to finance new roads and bridges, upgrade existing facilities and manage traffic flow during heavily congested periods of the day. Tolls are often regarded as a fair way to build badly needed new roads and bridges because the cost is paid by the people who derive the most benefit from these facilities rather than by taxpayers in general.

There are a variety of options for tolling highways or bridges. Tolls can be collected electronically or by using traditional toll plazas where the customer pays with cash. Modern electronic tolling systems allow users to set up a prepaid account, attach a small e-sticker or transponder to their vehicle, and pay the toll electronically at highway speeds, without stopping.

The information below explains the terms used in the Summary Feasibility Review and the different ways that are under consideration for charging and administering tolls on the proposed Newberg-Dundee Bypass Project.

Tolling Options

Tolls may be charged based on distance, exit, point, access or time period.

Distance tolling refers to charging a toll that matches the distance traveled by a vehicle on a toll road. Many systems issue a toll ticket upon entry onto the toll road and require payment of the toll upon presentation of the entry ticket at the exit. This is the "classic" toll road payment method and is considered the most "equitable" as travelers only pay for the amount (or distance) of road they use.

Exit tolling requires vehicles to pay the toll only once when exiting the toll road, typically a flat charge per exit.

Point tolling requires only one toll collection area or plaza for the entire road and is traditionally applied to bridges and tunnels. The advantage to this tolling method is that users know exactly what toll they will pay before using the road.

Access tolling is similar to point tolling except that a single toll plaza is located at the start of the toll road, and all vehicles crossing the plaza are charged a flat toll. This tolling option would capture all through-traffic using the corridor, whether the choice was made to use the faster Newberg-Dundee Bypass or existing OR99W. Access tolling would ensure full utilization of the capacity of the Newberg-Dundee Project and would reduce the impact of through commuter and truck traffic on city centers. It is expected that toll discounts may also be available to certain users such as local residents.

Period tolling requires users to purchase a prepaid ticket at a kiosk or over the Internet, which is then displayed in the vehicle. The ticket is normally established as a fixed amount for unlimited usage over a certain period of time such as a day, week, month or year.



Payment Collection Options

Barrier, cash, electronic tag and open road options for administering toll collection are being considered.

Barrier payment systems are the most traditional method of payment collection. They require vehicles to slow down or stop at a manned tollbooth or coin machine to pay the toll. Electronic toll collection (ETC) systems can also be used as part of barrier programs. ETC allows users who establish a prepaid account and affix a small e-sticker or transponder to their vehicle to drive through without stopping. While most new toll roads are moving towards free-flow methods, barrier systems still provide a simple and effective approach, which guarantees immediate payment and limits back-office costs.

Cash payment systems are managed through manned tollbooths or coin machines. Credit cards can also be used with this type of system.

Electronic Tag systems are electronic toll collection (ETC) systems that can be used in barrier and free-flow systems. The advantage of a Tag system is that it allows users to drive through barriers, at a reduced speed, but does not require that they stop. Tag accounts require toll road users to open a prepaid account with a toll operator to obtain a transponder. The transponder is then mounted inside the vehicle and tolls are collected electronically when the vehicle crosses under a "reader" mounted above the toll lane. Payment is automatically deducted from the tag account holder's prepaid account.

Open Road systems are electronic, open access, toll highway systems that do not require vehicles to stop or slow down to pay tolls. Free-flow systems use electronic toll collection, consisting of electronic tags and "readers" which are installed over the roadway. Toll is automatically deducted from the user's prepaid account. Non-tag holders are usually offered a number of alternatives to pay the toll, including prepaying at a kiosk or over the Internet. This usually allows the motorist to use the road for a specified number of trips or for a specified period of time.

Comparison of Tolling Methods			
Type of Toll	Barrier	Open Road	Barrier + Open Road
Distance	<ul style="list-style-type: none"> • Ticket issued upon entry and paid at exit • Requires multiple stops • Typically cash based 	<ul style="list-style-type: none"> • ETC system • No stops • Use of prepaid accounts, credit cards, debit cards 	<ul style="list-style-type: none"> • Possible to operate a barrier and open road system simultaneously
Exit	<ul style="list-style-type: none"> • Payment required at exit • Single stop • Typically cash based 	<ul style="list-style-type: none"> • ETC system • No stops • Use of prepaid accounts, credit cards, debit cards 	<ul style="list-style-type: none"> • Possible to operate a barrier and open road system simultaneously
Point	<ul style="list-style-type: none"> • Payment required in mid-trip • Single stop • Typically cash based 	<ul style="list-style-type: none"> • ETC system • No stops • Use of prepaid accounts, credit cards, debit cards 	<ul style="list-style-type: none"> • Possible to operate a barrier and open road system simultaneously
Access	<ul style="list-style-type: none"> • Payment required at entrance/exit • Single stop • Typically cash based 	<ul style="list-style-type: none"> • ETC system • No stops • Use of prepaid accounts, credit cards, debit cards 	<ul style="list-style-type: none"> • Possible to operate a barrier and open road system simultaneously
Period	<ul style="list-style-type: none"> • Possible multiple checkpoints to check pass • Cash or credit card based 	<ul style="list-style-type: none"> • Electronic monitoring system • Cash or credit card based 	<ul style="list-style-type: none"> • Possible to operate a barrier and open road system simultaneously