

Transportation Appendix

Transportation System Inventory

The City of Newcastle contains a network of roads and pedestrian facilities. Except for minor private roads, the street network is owned and operated by the City. Interstate 405, located on the northwestern edge of the City limits, provides regional access. Coal Creek Parkway, a principal north-south arterial, connects the City with Bellevue to the north and Renton to the south.

King County Metro provides transit service to Newcastle with three routes, Routes 114, 219, and 240. The Newport Hills Park-and-Ride lot is located at the I-405 interchange with Lake Washington Boulevard.

Roadway

Functional Street Classification

Transportation systems have a hierarchy of streets that provide through-movement and land access functions. Streets are classified based on these functions. All streets in Newcastle are classified according to the functions they serve.

State law requires that cities and counties classify their streets based on federal and state guidelines. (The legal basis for the classification of streets is in RCW 35.78.10 and RCW 47.26.180.) The City of Newcastle adopted King County's functional classification as an interim functional classification when the City was incorporated. The existing Transportation Element includes a map showing the long-range functional classification plan.

The streets in the City of Newcastle are classified according to the following hierarchy of street designations:

- Freeway
- Arterial
 - Principal Arterial
 - Minor Arterial
 - Collector Arterial
- Local Street
 - Neighborhood Collector Street
 - Local Access Street

Freeways are limited access roadways with barrier-separated medians, designed to serve intercity traffic. Although the portion I-405 that abuts the City is relative short, Interstate 405 is an important freeway.

Arterials have the function to carry through-traffic within the region or between communities. Arterials include three classes of streets, Principal Arterials, Minor Arterials, and Collector Arterials.

Principal Arterials are streets of regional significance connecting larger communities and carry the greatest portion of through-traffic or long distance travel.

Land access from a principal arterial to adjacent properties is minimized. A principal arterial is generally connected to a freeway and/or other arterials and carries high volumes of traffic.

Minor Arterials are streets of citywide significance connecting community centers and facilities with other arterials and collectors roads. Their traffic volumes are generally lower than principal arterials. Their main function is to provide through-traffic between communities or major community-based activity areas. Although they facilitate through- traffic, minor arterials provide some degree of local access function.

Collector Arterials collect traffic from local streets in residential areas and convey it to minor and/or principal arterials. While more local access may be allowed on collector arterials than on minor and principal arterials, they provide an important arterial function. Lower traffic speed limits are usually posted and lower traffic volumes are observed than on minor and principal arterials.

Local Streets are streets having the primary function to provide access within neighborhoods. Local Streets are categorized into two levels: Neighborhood Collector Streets and Local Access Streets.

Neighborhood Collector Streets are local streets that collect traffic from neighborhoods and channel it to arterials. Neighborhood Collectors receive a higher priority than other local streets for application of traffic calming measures, street sweeping, and snow removal.

Local Access Streets are local streets in neighborhoods and commercial areas that provide direct access to abutting properties. Through-traffic is generally discouraged on local access streets.

Table TR-1 lists the City of Newcastle streets by functional street classification. **Figure TR-1** shows the Functional Street Classification Map. (Note, all figures follow the text at the end of the report)

Table TR-1: City of Newcastle Functional Street Classification

Classification	From	To
Principal Arterial		
Coal Creek Parkway	North City Limit	South City Limit
Newcastle Golf Club Road	Coal Creek Parkway	East City Limit
Minor Arterial		
112th Avenue SE	Newcastle Way	North City Limit
Newcastle Way	112th Avenue SE	Coal Creek Parkway SE
Newcastle Way	Coal Creek Parkway	Newcastle Golf Club Road
Lake Washington Boulevard	North City Limit	City Limit
112th Place SE/114th Avenue SE/SE 88th Street	West City Limit	116th Avenue SE
116th Avenue SE	SE 88th Street	SE 84th Street
SE 84th Street/SE 89th Place	116th Avenue SE	Coal Creek Parkway

Classification	From	To
Collector Arterial		
116th Avenue SE	SE 84th Street	Newcastle Way
SE 76th Street	West City Limit	116th Avenue SE
Extension of Newcastle Golf Club Road	Newcastle Golf Club Road	Coal Creek Parkway
Neighborhood Collector Street		
123rd Avenue SE	Newcastle Way	SE 74th Street
125th Place SE/127th Place SE/SE 73rd Place/129th Avenue SE	SE 74th Street	Newcastle Way
SE 77th Place/118th Avenue SE/SE 75th Place	116th Avenue SE	122nd Place SE
SE 74th Street/122nd Place SE/SE 80th Way/129th Place SE	125th Place SE	129th Place SE
SE 84th Way/129th Place SE/SE 86th Place/126th Place SE	Coal Creek Parkway SE	80th Way SE
SE 88th Street/SE 88th Place/123rd Avenue SE	116th Avenue SE	SE 89th Place SE
SE 79th Street/SE 79th Drive/148th Avenue SE/80th Place SE/149th Place SE/80th Street/155th Avenue SE	Coal Creek Parkway SE	Newcastle Golf Club Road
136th Avenue SE	SE 79th Drive	Newcastle Golf Club Road
134th Avenue SE	133rd Avenue SE	SE 79th Street
135th Avenue SE/139th Way/140th Avenue SE/SE 91st Street	Coal Creek Parkway	Coal Creek Parkway
144th Place SE	136th Avenue SE	SE 87th Street
150th Place SE	SE 93rd Court	May Valley Road/Ci ty Limit

Street Inventory

The City of Newcastle maintains an inventory of all City streets. The inventory includes information on: right-of-way width, sidewalks, pavement conditions, width and type

Traffic Control Devices

In order for the City to move the vehicles on its streets safely and efficiently, traffic control devices such as traffic signals, stop and yield signs, lane markings and traffic calming devices are placed throughout the City. **Figure TR-2** shows the locations of existing traffic signals and all-way stops.

Traffic Volumes

Average daily, AM peak hour and PM peak hour traffic volumes on arterials are shown in **Figure TR-3**. Coal Creek Parkway is the most heavily traveled street in

the City, carrying traffic volumes in a range of 22, 000 to 25,000 vehicles per day. Newcastle Way carries from 6,800 to 9,000 vehicles per day while Newcastle Golf Course Road carries about 5,000 vehicles per day.

Level of Service

Quality of service requires quantitative measures to characterize operational conditions within a traffic stream. Level of service (LOS) is a quality measure describing operational conditions within a traffic stream, generally in terms of such measures as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience.

Six levels of LOS are defined for each type of facility that has analysis procedures available. Letters designate each level, from A to F, with LOS A representing the best operating conditions and LOS F the worst. Each level of service represents a range of operating conditions and the driver’s perceptions. Safety is not included in the measures that establish service levels.

Level of service for signalized intersections is defined in terms of control delay, which is a measure of driver discomfort, frustration, fuel consumption, and increased travel time. The delay experienced by a motorist is made up of a number of factors that relate to control, geometries, traffic, and incidents. Total delay is the difference between the travel time actually experienced and the travel time in the absence of traffic control, geometric delay, any incidents, and any other vehicles. The Highway Capacity Manual (HCM 2000) defines the signalized and unsignalized intersections with the average control delay per vehicle in **Table TR-2**.

Table TR-2: Definition of Intersection Level of Service

Level of Service	Signalized Stopped Delay per Vehicle (seconds)	Unsignalized Average Total Delay per Vehicle (seconds)	Description
A	0-10	0-10	Little or no delay
B	10-20	10-15	Short delays
C	20-35	15-25	Average delays
D	35-55	25-35	Long delays
E	55-80	35-50	Very long delays
F	>80	>50	Failure - extreme congestion

Source: Highway Capacity Manual, 2000.

As required by the GMA, the City established level of service standards in the Comprehensive Plan for all arterial intersections. It adopted the following LOS standards at signalized and unsignalized arterial intersections:

- LOS E on Coal Creek Parkway SE within the Community Business Center
- LOS D on all other arterials

The City has been monitoring levels of service at the intersections included in **Table TR-3** because they carry relatively high levels of traffic.

Table TR-3: Intersection Level of Service (2002)

Signalized Intersections	AM Peak Hour		PM Peak Hour		Note
	LOS	Delay (sec.)	LOS	Delay (sec.)	
Coal Creek Parkway SE & Newcastle Way	B	13	B	16	
Coal Creek Parkway SE & SE 79th Place	B	15	B	12	
Coal Creek Parkway SE & SE 84th Way	A	9	C	25	
Coal Creek Parkway SE & SE 91st Street	B	11	A	7	
Unsignalized Intersections (all-way stop controlled)					
116th Avenue SE & SE 76th Street	A	9	A	8	
116th Avenue SE & Newcastle Way	D	32	B	14	
116th Avenue SE & SE 88th Street	A	8	A	8	
Newcastle Golf Club Road & Newcastle Way	A	9	B	11	
134th Avenue SE & SE 79th Place	A	8	A	8	
Unsignalized Intersections (stop-controlled on minor approach only)¹					
112th Avenue SE & Lake Washington Blvd	F	>50	C	23	EB approach
	F	>50	B	12	WB approach
123rd Avenue SE (North of Newcastle Way) & Newcastle Way	B	15	B	16	NB approach
	B	14	C	25	SB approach
129th Avenue SE & Newcastle Way	C	16	B	15	NB approach
	C	19	F	>50	SB approach
Coal Creek Parkway & SE May Valley Road	F	>50	C	15	WB approach (SE May Valley Road is outside City of Newcastle)
Coal Creek Parkway & SE 89th Place	E	43	F	>50	EB approach
Bolded cells indicate the areas where LOS standard is not being met. ¹ The LOS shown is the LOS for minor approach movement(s) only.					

Transit

King County Metro (KCM) provides public transportation services in the City. Three routes 114, 219 and 240, serve the residential areas. Route 240 provides local service on Coal Creek Parkway connecting Bellevue with Renton. Route 219 is a community circulator connecting the communities of Factoria, Somerset, Newport Hills, and Newcastle. **Figure TR-4** shows the transit routes and frequencies. Approximately half of the City is within the Route 925 Dial-A-Ride-Transit (DART) service area. To use this service, a passenger must make a reservation at least two hours before the trip time.

The Newport Hills Park-and-Ride lot is located adjacent to the City along I-405 at the Lake Washington Boulevard interchange area. KCM Routes 111, 167, 219, 247, 280, 342, 925, 952, and 560 serves this lot.

Pedestrian and Bicycle

The City of Newcastle requires all developments to provide sidewalks. King County did not have such requirements when The City of Newcastle was unincorporated. **Figure TR-8** shows the City of Newcastle's Pedestrian Circulation System. The system provides for the future and present connections of existing and proposed sidewalks, urban trails and nature trails throughout the City.

King County produced a Bicycle Map identifying the roads and trails that can be used by bicyclists throughout King County, including the City of Newcastle. Coal Creek Parkway, north of the City limits, includes on-street bicycle lanes. However, there are no regional bicycle trails or lanes within the City of Newcastle. The existing Bicycle Routes within the City's limits is shown in **Figure TR-9**.

Currently the City of Newcastle has adopted Public Works standards for the design of Bikeways. The standards are in accordance with the Washington State Department of Transportation (WSDOT) standards and the ASSHTO Guide for development of Bicycle Facilities. **Figure TR-10** designates the future bicycle route improvements. The City of Newcastle's standards for bicycle improvements are as follows.

Bike Path (Class I Bikeway). This type of path is a separated paved path for the principle use of Bicycles. The paths are 10 feet wide except in high use areas or areas serving maintenance vehicles the paths are 12 feet wide. This type of Class I Bikeway is intended for larger trails such as the Burke-Gilman in Seattle. Bike Paths do not exist in the City of Newcastle.

Bike Lane (Class II Bikeway). This type of lane is part of a directional route system. The bike lane is 5 feet wide painted lane. The Class II Bikeway is provided on major arterials such as Coal Creek Parkway.

Bike Routes (Class III Bikeway). This type of route provides a widened paved outer lane to accommodate bicycles in the same lane as motor vehicles. The lane is increased by at least 3 feet. These lanes may also be used for parking where allowed. Bike Routes are designated by signs and connect to higher use bicycle facilities. The Class III Bikeway is provided on neighborhood collectors and is constructed as shoulder improvements.

Shared Roadway with No Designation (Class IV Bikeway). This type of designation is defined as all roads not categorized above where bicycles share the roadway with motor vehicles. A majority of the existing bike routes within the City of Newcastle are categorized as Class IV Bikeways.

System Deficiencies

The data for existing transportation conditions provides a baseline for defining the existing and future deficiencies in the transportation system.

LOS deficiencies are found at several intersections along the Coal Creek Parkway, Newcastle Way, and 112th Avenue SE corridors. The eastbound approach at the unsignalized intersection at Coal Creek Parkway and SE 89th Way is operating at LOS E during the AM peak hour and LOS F during the PM peak hour. The westbound approach at the intersection of Coal Creek Parkway and SE May Valley Road operates at LOS F in the AM Peak hour. The unsignalized intersection at 112th Avenue SE and Lake Washington Boulevard operates poorly for the movements controlled by the stop signs.

Most arterials in the City lack adequate pedestrian facilities such as sidewalks and trails. Although the City requires sidewalks from developers and property owners when developments are proposed, there are streets in the commercial areas where sidewalks are not adequate.

Future Conditions

Projected Household and Employment Growth

Since the majority of the land within the City of Newcastle has been largely developed, future land use growth in the City is expected to be relatively modest. Travel forecasts were made with a model specifically developed for this purpose. The land use growth assumptions used to develop this model assumed housing and employment figures greater than the growth targets used elsewhere in the comprehensive plan. They are conservatively high so that the model results for the improvements can ensure concurrency with future development. The potential development in the area known as Port Quendall in the City of Renton was also added to the model, because the development at the site would impact traffic conditions within the City of Newcastle.

City of Newcastle Growth

(2002 – 2022) Assumptions

Housing Units: 1,290 units

Employment: 1,300 jobs

Hotel rooms: 0 units

Port Quendall (Renton)

Housing Units: 1,600 units

Employment: 4,800 jobs

Hotel rooms: 120 units

2022 Traffic Forecasts and Level of Service

Figure TR-5 shows the projected PM peak hour traffic volumes for 2022 with and without the proposed capacity expansion on I-405 (I-405 Final EIS). If by 2022, the I-405 capacity expansion is completed with the Preferred Alternative configuration, the PM peak hour traffic volumes on Coal Creek Parkway will decrease by 200 – 350 vehicles per hour each direction, and increase 10 – 150 vehicles per hour on the east-west arterials.

Using the 2022 PM peak hour volumes, the level of service at arterial intersections were calculated with the Highway Capacity Manual 2000 method. **Table TR-4** and **Figure TR-6** show the results of the level of service analysis, with all facility improvements as identified in **Figure TR-7** and assuming that all phases of the Coal Creek Parkway improvements would be completed.

Table TR-4: 2022 Level of Service with and without I-405 Capacity Expansion

Signalized Intersections	PM Peak Hour without I-405 Expansion		PM Peak Hour with I-405 Expansion		Notes
	LOS	Delay (sec.)	LOS	Delay (sec.)	
Coal Creek Parkway SE & Newcastle Way	E	59	D	40	With proposed improvements
Coal Creek Parkway SE & SE 79th Place	A	8	A	8	With proposed improvements
Coal Creek Parkway SE & SE 84th Way	B	10	A	9	With proposed improvements
Coal Creek Parkway & SE 89th Place	C	21	B	17	With proposed improvements
Coal Creek Parkway SE & SE 91st Street	A	6	A	6	With proposed improvements
Coal Creek Parkway & SE May Valley Road	B	12	B	11	With proposed improvements
Unsignalized Intersections (all-way stop controlled)					
116th Avenue SE & SE 76th Street	C	19	C	17	
116th Avenue SE & Newcastle Way	F	>50	F	>50	
116th Avenue SE & SE 88th Street	B	14	B	15	
Newcastle Golf Club Road & Newcastle Way	F	>50	F	>50	
134th Avenue SE & SE 79th Place	A	9	A	9	
Unsignalized Intersections (stop-controlled on minor approach only)¹					
112th Avenue SE & Lake Washington Blvd	F	>50	F	>50	EB approach
	F	>50	F	>50	WB approach
123rd Avenue SE & Newcastle Way	D	32	E	36	NB approach
	F	>50	F	>50	SB approach
129th Avenue SE & Newcastle Way	F	>50	F	>50	NB approach
	F	>50	F	>50	SB approach
Note: Bolded cells indicate the areas where LOS standard cannot be met. ¹ The LOS shown is the LOS for minor approach movement(s) only.					

Future Deficiencies

Upon completion of the Coal Creek Parkway improvement project, all the intersections with signals will operate at satisfactory levels of service. The level of service standard will be met in this corridor without the I-405 capacity expansion. If

the capacity of I-405 is expanded, the level of service on Coal Creek Parkway will improve further.

Outside the Coal Creek Parkway corridor, several unsignalized intersections will operate under unsatisfactory level of service conditions by 2022. These intersections are as follows:

- 116th Avenue SE & Newcastle Way
- Newcastle Golf Club Road & Newcastle Way
- 112th Avenue SE & Lake Washington Boulevard
- 123rd Avenue SE & Newcastle Way
- 129th Avenue SE & Newcastle Way

Transportation Facility Plan (2002 – 2022)

Based on the 2022 traffic forecasts and the level of service analysis and standards, the Transportation Facility Plan for 2002 – 2022 was developed. The transportation improvements in the Facility Plan are described in **Table TR-5**.

Table TR-5: Transportation Facility Plan (2002-2022)

Project Description	Street Classification	Priority	Estimated Cost
Widen Coal Creek Parkway from Newcastle Way to May Creek Bridge to 4/5-lanes with pedestrian and bike facilities, curbs, gutters, and sidewalks. Signals are included at commercial driveway in the vicinity of NE 70th St., 133rd Avenue NE, SE 84th Way, SE 89th Place and SE May Valley Road. Replace May Creek Bridge. (Phase II and Phase III)	Principal Arterial	High Priority	\$14,800,000
Install a signal in the CCP commercial area for pedestrians	Principal Arterial	High Priority	\$250,000
Reconstruct 136th Avenue SE from SE 79th Place SE to 135th Avenue SE with a curb, gutter, and sidewalk on one side and shared bicycle facilities.	Neighborhood Collector	High Priority	\$3,900,000
Maintain the Pavement Management System (PMS) and provide street overlays.	City-wide	High Priority	\$4,900,000
Implement Neighborhood Traffic Control Plan.	City-wide	High Priority	\$400,000
Construct a new Transit Center in the vicinity of Coal Creek Parkway/Newcastle Way.	City-wide	High Priority	\$6,750,000
Install a signal at the intersection of Lake Washington Blvd. and 112th Avenue SE.	Minor Arterial	Medium Priority	\$150,000
Install a signal and add turn lanes at the Newcastle Way/116th Avenue SE intersection	Minor Arterial	Medium Priority	\$125,000
Install a signal at the Newcastle Way/129th Avenue SE intersection.	Minor Arterial	Medium Priority	\$125,000
Widen the east side shoulder on Lake Washington Boulevard from SE 64th Street to City limit for pedestrians and bicycles.	Minor Arterial	Medium Priority	\$500,000
Upgrade and widen 112th Avenue SE from SE 64th Street to Newcastle Way to three lanes and add curbs, gutters, sidewalks, and bicycle lanes on both sides of the road.	Minor Arterial	Medium Priority	\$1,600,000
Upgrade and widen Newcastle Way, from 112th Avenue SE to 129th Avenue SE to three lanes and add curbs, gutters, sidewalks, and bike lanes on both sides of the roadway.	Minor Arterial	Medium Priority	\$6,700,000
Upgrade 116th Avenue SE from SE 84th Street to SE 88th Street and 112th Place SE from the west city limit to 116th Avenue SE with bike lanes, curbs, gutters, and sidewalks. Add left turn lanes at key intersections.	Minor Arterial	Medium Priority	\$1,800,000

Project Description	Street Classification	Priority	Estimated Cost
Signalize the intersection of 116th Avenue SE and SE 84th Street.			
Upgrade 89th Place from the intersection with 84th Street to Coal Creek Parkway with curbs gutters and sidewalks and shared bike facilities, or non-motorized facilities in conjunction with May Creek Trail. Add left turn lanes at key intersections.	Minor Arterial	Medium Priority	\$3,900,000
Install a signal at the Newcastle Way/123rd Avenue SE (North Leg)	Minor Arterial	Medium Priority	\$125,000
Implement walkway improvement programs	City-wide	Medium Priority	\$300,000
Install a signal at Newcastle Golf Course Road/Newcastle Way intersection.	Principal/Minor Arterial	Low Priority	\$150,000
Upgrade 116th Avenue SE from Newcastle Way to SE 84th Street by adding curbs, gutters and sidewalks, and bicycle lanes on both sides. Add left turn lanes at key intersections.	Collector Arterial	Low Priority	\$4,600,000
Upgrade 136th Avenue SE from Newcastle Golf Club Road to SE 75th Street with curbs, gutters, and sidewalks. Realign the intersection with Newcastle Golf Club Road to create a four-legged intersection when the extension of Newcastle Golf Club Road to Coal Creek Parkway is developed. Add a signal to this intersection.	Neighborhood Collector	Low Priority	\$3,300,000
Construct a new two-lane arterial on SE 84th Street from SE 89th Place to 116th Avenue SE. Add left turn lanes at key intersections.	Minor Arterial	Development	\$2,900,000
Construct a new road connecting Newcastle Golf Club Road with Coal Creek Parkway through the Mutual Materials site with signals.	Principal Arterial	Development	\$3,500,000
Upgrade 144th Place SE from 136th Avenue SE to SE 87th Street with curbs, gutters, and sidewalks.	Neighborhood Collector	Development	\$3,200,000
Construct a new two-lane road extending 144th Place SE to SE May Valley	Neighborhood Collector	Development	\$3,300,000
Construct a new two-lane neighborhood collector on SE 138th Way SE from 135th Avenue SE to 140th Avenue SE	Neighborhood Collector	Development	\$2,100,000
Total Cost			\$68,975,000
Source: Estimated Costs developed by City of Newcastle Public Works.			

The location and a brief description of each transportation facility improvement listed in **Table TR-5** are shown in **Figure TR-7**.

The level of service for each intersection was re-calculated with the improvements in the Transportation Facility Plan. The results of the LOS calculation with the Transportation Facility Plan are shown in **Table TR-6**. All arterial intersections in the City in 2022 will operate better than the LOS standards with Transportation Facility Plan Improvements.

Table TR-6: 2020/2022 Level of Service with the Transportation Facility Plan with and without I-405 Capacity Expansion

Signalized Intersections	PM Peak Hour without I-405 Expansion		PM Peak Hour with I-405 Expansion		Notes
	LOS	Delay (sec.)	LOS	Delay (sec.)	
Coal Creek Parkway SE & Newcastle Way	E	59	D	40	With proposed improvements
Coal Creek Parkway SE & SE 79th Place	A	8	A	8	With proposed improvements
Coal Creek Parkway SE & SE 84th Way	B	10	A	9	With proposed improvements
Coal Creek Parkway & SE 89th Place	C	21	B	17	With proposed improvements
Coal Creek Parkway SE & SE 91st Street	A	6	A	6	With proposed improvements
Coal Creek Parkway & SE May Valley Road	B	12	B	11	With proposed improvements
129th Avenue SE & Newcastle Way	B	13	B	11	Signal
112th Avenue SE & Lake Washington Blvd	A	9	A	8	Signal with EB, NB and SB left turn pockets
116th Avenue SE & Newcastle Way	B	18	B	13	Signal
Newcastle Golf Club Road & Newcastle Way	C	25	B	18	Signal
123rd Avenue & Newcastle Way	B	5	B	14	Signal
Unsignalized Intersections (all-way stop controlled)					
116th Avenue SE & SE 76th Street	C	19	C	17	
116th Avenue SE & SE 88th Street	B	14	B	15	
134th Avenue SE & SE 79th Place	A	9	A	9	
Source: City of Newcastle					

Financial Plan

Existing Revenues and Expenditures

Revenues available for financing transportation improvements in the City can be highly variable, depending on the amount of development activity, grant applications and awards, and local economic factors. Funds for transportation improvements typically come from the following sources:

- City general funds (sales tax, real estate excise tax, and property tax)
- Distributions from State gas tax
- Developer contributions and mitigation (impact fees)
- Grants-both Federal and State sources
- Bond financing
- Local Improvement District financing
- Contributions from local/regional jurisdictions (Bellevue, King County and Sound Transit)

In 1995 and 1996, the City spent approximately a half million dollars on transportation improvements, typical of expenditures in the recent past. However, the City's expenditures on transportation improvements have dramatically increased due to Coal Creek Parkway construction.

Funding Assumptions for 2022 Transportation Facility Plan

The estimated total cost of the 2002-2022 Transportation Facility Plan is \$69 million in 2002 dollars. Funding sources identified for each transportation improvement project in the 2022 Transportation Facility Plan include:

- Real Estate Excise Tax - Funds from home sales to be used for capital or land purchase only
- Mitigation - Any of the available mitigation funds from King County Mitigation Payment System, Impact Fees, SEPA mitigation, etc.
- Levy - Voter approved levy for reoccurring maintenance
- Bond - Voter approved bond for capital projects
- Grant - Any source of grant funds such as Transportation Improvement Board, Federal funds, etc.
- Sound Transit – Sound Transit program funds such as a transit center
- KC/RTID - Regional package for voter approval following I-51 or King County capital funds
- Bellevue - Adjoining City contributions
- Local Improvement District – Tax district supported by the property owners
- I-405 - Funds from I-405 project

Table TR-7 summarizes funding sources for all the projects included in the Transportation Facility Plan. In order for the City to complete the 2002-2022

Transportation Facility Plan, the city's expenditures on transportation must be increased to an average of \$3 million per year. Furthermore, the City will need to aggressively pursue federal and state grants for transportation.

Table TR-7: Revenues Estimated for the 2002-2022 Transportation Facility Plan

Funding Sources	2002-2020 Revenue Estimates
Real Estate Excise Tax	\$4,040,000
Mitigation	\$17,850,000
Levy	\$3,375,000
Bond	\$10,650,000
Grant	\$20,025,000
Sound Transit	\$7,000,000
King County/Regional Transportation Improvement District	\$1,985,000
Bellevue	\$50,000
Local Improvement District	\$3,500,000
I-405	\$500,000
Total	\$68,975,000
Source: City of Newcastle	

List of Transportation Appendix Figures

- Figure TR-1 Functional Street Classification
- Figure TR-2 Traffic Control Devices
- Figure TR-3 Average Daily Traffic Volumes
- Figure TR-4 Metro Transit Routes and Frequencies
- Figure TR-5 2022 PM Peak Hour Traffic Volumes
- Figure TR-6 2022 PM Peak Hour Level of Service with the Transportation Facility Improvements (Without and With I-405 Expansion)
- Figure TR-7 2002-2022 Transportation Facility Plan
- Figure TR-8 Existing Bicycle Routes
- Figure TR-9 Future Bicycle Route Improvements