

MEMORANDUM

Date:	April 18, 2025	TG:	1.23191.01
To:	Philip Hill, City Administrator, City of Lake Forest Park		
From:	Drew Heckathorn and Jon Pascal, PE, Transpo Group		
Subject:	Evaluation of Posted Speed Limits on the SR 522 & SR 104 Corridors		

This memorandum summarizes the evaluation of posted speed limits conducted for State Route (SR) 522 and SR 104 within the City of Lake Forest Park. As state highways, WSDOT has jurisdiction over these roadways, including the setting of speed limits. The City has requested a study to consider lowering the speed limit on each state highway to improve safety, help reduce the risk of collisions, and increase comfort for people walking, biking, and taking transit. This memorandum references roadway context, recent collision history, traffic volumes and speeds, and best practice roadway design guidance to make this assessment and provide recommendations.

Study Purpose and Background

Changing Best Practices for Speed Limit Setting

National best practice guidance for setting speed limits on public roadways has recently evolved to include a greater emphasis on local land use context, safety for all roadway users, and improved comfort for people walking, biking, and taking transit. Historically, speed limit setting guidance focused on observed vehicle speeds along a given roadway and often set the speed limit to equal the 85th percentile of observed vehicle speeds. The Manual of Uniform Traffic Control Devices (MUTCD) recently updated¹ its guidance to expand the focus away from 85th percentile speeds to incorporate additional information into the recommended approach to speed limit setting. Additionally, the National Association of City Transportation Officials (NACTO) released *City Limits, Setting Safe Speed Limits on Urban Streets*² which establishes a multivariate, roadway context-based approach to setting speed limits.

Lake Forest Park Safe Speed Study³

In response to the changing best practice guidance and to align with the City's vision to create a safe, sustainable, accessible and equitable transportation system for all people in the community, the City, working with Transpo Group, conducted a safe speed study to evaluate the posted speed limits for all public roadways owned and maintained by the City (which excluded SR 522 and SR 104). The objective of the study was to consider a comprehensive set of speed limit changes, employing an updated methodology reflecting the latest best practice guidance. As a result of the study and adoption of NACTO *City Limits* as the City's speed limit setting methodology, the City Council approved reducing the speed limit to 25 mph for all City-owned arterial and collector roadways and 20 mph for all City-owned local access streets.

¹ *Manual on Uniform Traffic Control Devices for Streets and Highways, 11th Edition*. U.S. Department of Transportation, December 2023

² *City Limits, Setting Safe Speed Limits on Urban Streets*, National Association of City Transportation Officials, Summer 2020

³ *Safe Speed Study*, City of Lake Forest Park, March 2024

Recent WSDOT Speed Limit Reduction in Kenmore and Bothell

In 2022 and 2023, WSDOT conducted a speed limit setting study of SR 522 for the entire highway segment in Lake Forest Park and Kenmore and a portion of the highway in Bothell. As a result of the study, WSDOT maintained the existing speed limit on SR 522 through Lake Forest Park at 40 mph and reduced the speed limit through Kenmore and a portion of Bothell to 35 mph. The study cited, as described by WSDOT in an e-mail to the City Council⁴, the following factors to justify the lower speed limit set for Kenmore and Bothell than was set for Lake Forest Park:

- Higher number of commercial and retail development driveways in Kenmore
- Lower 85th percentile speeds and speed variation in Kenmore
- Visual constraints due to curbs, sidewalks, and raised medians in Kenmore and Bothell

Sound Transit Stride Project

As part of the voter-approved Sound Transit 3 (ST3) transit expansion package, SR 522 in Lake Forest Park will be reconstructed to include enhanced business access and transit (BAT) lanes, raised medians and landscaping (including new street tree plantings), and consistent defined curblines and sidewalks on both sides of the highway. These improvements will help support increased bus service and anticipated ridership growth at stops along SR 522 in Lake Forest Park. This new roadway configuration will be similar in design to the roadway segments of SR 522 in Kenmore and Bothell, which both have speed limits of 35 mph.

Lake Forest Park Resolution 23-1910

To further pursue the City's vision for a safe, sustainable, accessible and equitable transportation system, the City has formally requested a speed limit reduction from 40 mph to 35 mph for SR 522, from 40 mph to 25 mph for SR 104 north of 35th Avenue NE, and from 30 mph to 25 mph for SR 104 south of 35th Avenue NE. Since this resolution was passed, the City and WSDOT staff have worked together to reduce the speed limit for SR 104 north of 35th Avenue NE from 40 mph to 35 mph in August 2024. It is our understanding that the City would like to maintain the speed limit for SR 104 north of 35th Avenue NE at 35 mph given the recent changes, while still pursuing the stated speed limit reduction for SR 522 and SR 104 south of 35th Avenue NE. While WSDOT has authority over determining speed limits on these state highways, this study provides additional data, analysis, and findings to help inform the speed limit setting determination.

Corridor Descriptions

SR 522

SR 522 in Lake Forest Park is a generally north-south arterial running parallel to Lake Washington and provides access between the City of Seattle to the south and the City of Kenmore to the north. SR 522 is designated as a Major Highway in the City's Transportation Element. Within a majority of Lake Forest Park, the speed limit on SR 522 is set at 40 mph, with a small segment signed at 35 mph near the border with the City of Seattle. In Kenmore, the speed limit on SR 522 is set at 35 mph, while in Seattle the speed limit is set at 30 mph. Figure 1 illustrates the location of SR 522 within the City and the existing speed limits along the corridor both within the City and in the two neighboring jurisdictions.

⁴ Brian Nielsen, e-mail message to Semra Riddle, June 1, 2023

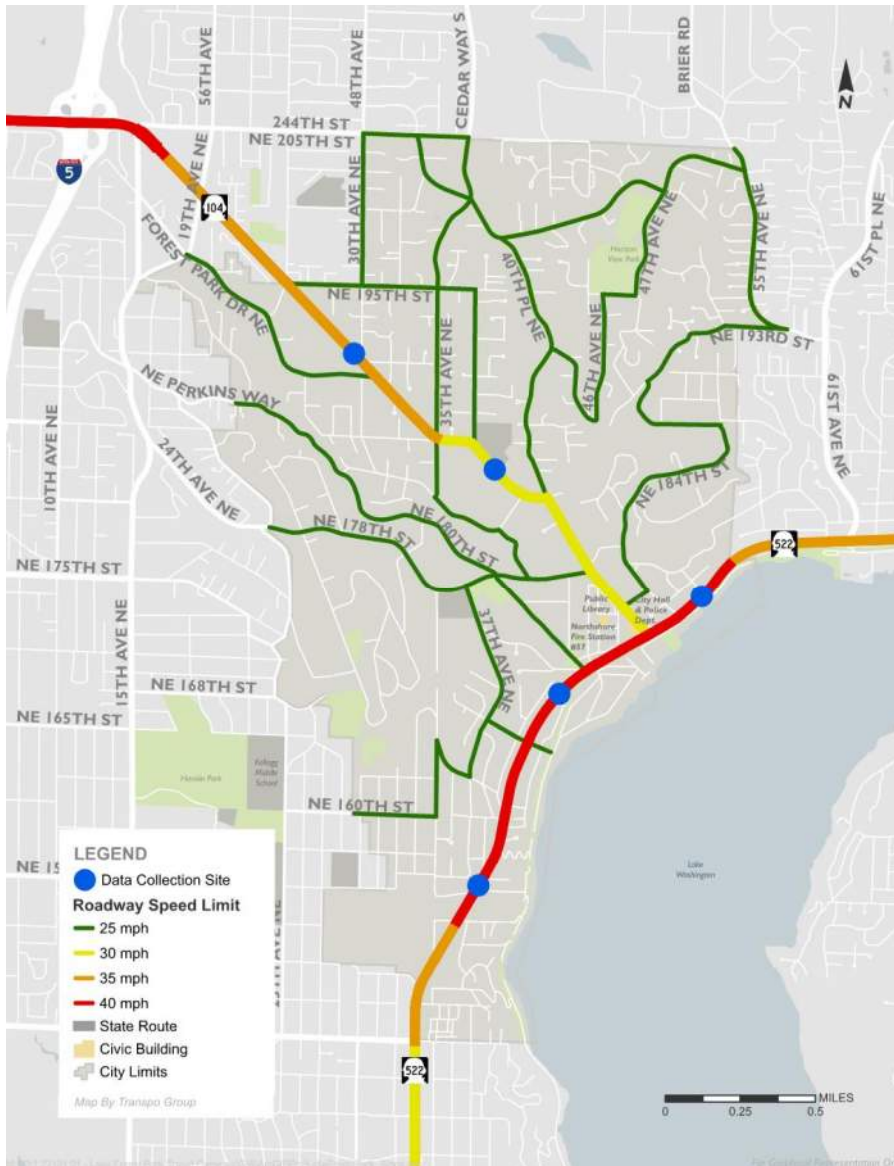


Figure 1 – Lake Forest Park Speed Limits and Vicinity Map

Along the corridor, SR 522 provides two general purpose travel lanes in each direction with travel lanes approximately 10 feet wide. The corridor provides one Business Access and Transit (BAT) lane in each direction (approximately 11-12 feet wide) along the entire Lake Forest Park segment in the southbound direction and north of Brookside Boulevard NE in the northbound direction. Approximately half (1.1 miles) of the SR 522 segment in Lake Forest Park currently includes raised and curbed medians, with a mix of median landscaping (mostly low-height hedges, bushes, and grass) and left-turn vehicle pockets. A 0.7-mile segment between NE 157th Place and Brookside Boulevard includes a striped two-way left-turn median. The remaining 0.4-mile segment between 47th Avenue NE and the northern city boundary with Kenmore does not include a median lane or raised median barrier. WSDOT removed the centerline c-curb within the last two years on the segment between 47th Avenue NE and the City of Kenmore.

In lieu of an existing BAT lane, a shoulder area of varying width is provided south of Brookside Boulevard NE in the northbound direction. Most of the shoulder area along this segment can be

used as on-street parking. Sidewalks are provided at some locations along the roadway south of 38th Avenue NE and along the street frontage for the Town Center at Lake Forest Park shopping center. The corridor includes three traffic safety cameras to detect vehicles running red lights.

The Burke-Gilman Trail parallels SR 522 between the highway and Lake Washington and provides a high-quality multiuse path connection for people walking and biking. As mentioned, the upcoming Sound Transit Stride project will install enhanced BAT lanes, raised medians, landscaping, curblines, and sidewalks along the entire corridor within the City.

SR 522 includes a large mix of commercial, multifamily, and single-family residential driveways with direct access onto the highway. Many of the driveways, especially in the residential areas south of Brookside Boulevard NE, are obscured by trees and fencing which can give drivers the false perception that this segment of SR 522 is a limited access highway. In addition to the visual constraints caused by the trees and fencing along the corridor, many side streets approach SR 522 at sharp angles creating challenging vehicle turning maneuvers and limited sight lines.

SR 104

SR 104 in Lake Forest Park is a generally north-south arterial and provides access between Lake Forest Park and the City of Shoreline to the north. SR 104 is designated as a Major Highway in the City's Transportation Element. Within Lake Forest Park, the speed limit on SR 104 is set at 35 mph northwest of 35th Avenue NE and 30 mph to the south. In Shoreline, the speed limit on SR 104 is set at 35 mph between the city boundary with Lake Forest Park and Milepost 30 (approximately halfway between 15th Ave NE and 19th Ave NE). Further to the west in Shoreline, the speed limit on SR 104 is set at 40 mph. Figure 1 illustrates the location of SR 104 within the City and the existing speed limits along the corridor both within the City and in neighboring Shoreline.

Along the corridor in Lake Forest Park, SR 104 provides one general purpose travel lane in each direction with travel lanes approximately 11 feet wide and left turn pockets at most intersections. For most of the corridor within the City, a shoulder area of varying width is provided along the west side of the highway and a sidewalk is provided along the east side.

In coordination with the City, WSDOT is reconfiguring the SR 104/40th Place NE/NE 184th Street intersection to construct a roundabout to improve safety and operations at the intersection. As a result of this improvement, vehicular speeds approaching this intersection are likely to be reduced.

The land use context along SR 104 is predominantly residential, with many single-family driveways with direct access onto the highway. There are also some multifamily and commercial driveways throughout the Lake Forest Park segment of SR 104.

Study Approach

Historically, speed limits were evaluated and set primarily using the 85th percentile speed. As mentioned, best practice guidance for setting speed limits has evolved to include a more holistic review of speed and safety data as well as roadway context information. For example, the most recent version of the MUTCD states:

“Among the factors that should be considered when reevaluating speed limits are the following:

- A. Roadway environment (such as roadside development, number and frequency of driveways and access points, and land use), functional classification, public transit volume and location or frequency of stops, parking practices, and pedestrian and bicycle facilities and activity;

- B. Roadway characteristics (such as lane widths, shoulder condition, grade, alignment, median type, and sight distance);
- C. Geographic context (such as an urban district, rural town center, non-urbanized rural area, or suburban area), and multi-modal trip generation;
- D. Reported crash experience for at least a 12-month period;
- E. Speed distribution of free-flowing vehicles including the pace, median (50th percentile), and 85th percentile speeds; and
- F. A review of past speed studies to identify any trends in operating speeds.”

To follow best practice guidance, this study considers posted speed limits, speed data, traffic counts, collision records, and surrounding land use context to assist in reviewing the posted speed limits. Specifically, the study approach is built upon the NACTO *City Limits* methodology that has been adopted by the City Council and the corresponding methodology developed for the Lake Forest Park *Safe Speed Study*.

SR 522 Evaluation of Posted Speed Limits

Vehicle Speeds and Volumes

Vehicle speeds and volumes were reviewed along SR 522 and observed over a one-week period in October 2024 at two locations and a one-week period in April 2025 at one additional location. The October 2024 data was collected at the following two locations along the corridor: approximately 700 feet south of Brookside Boulevard NE and approximately 300 feet north of NE 153rd Street. The April 2025 data was collected approximately 1,600 feet north of SR 104 (see Figure 1 for the data collection locations). The traffic data collection sheets are provided in Attachment A.

Table 1 shows the median and 85th percentile vehicle speeds and average daily traffic (ADT) volumes for SR 522 at the three data collection locations within the City. As mentioned, the 85th percentile vehicle speed has historically been utilized as a benchmark for setting posted speed limits. However, best practice speed limit setting guidance from MUTCD, NACTO, and City policies supports a shift away from focusing on the 85th percentile vehicle speed to place a greater emphasis on safety, equity, and multimodal travel. Therefore, the 85th percentile vehicle speeds were not utilized as a benchmark to determine speed limit recommendations for this study.

Table 1. SR 522 Traffic Speed and Volume

Indicator	SR 522 (North of SR 104)		SR 522 (North of 165th)		SR 522 (South of 165th)	
	NB	SB	NB	SB	NB	SB
Posted Speed Limit (mph)	40	40	40	40	40	40
Average Daily Traffic (vehicles)	20,500	20,600	15,900	11,400	16,600	16,500
Median Speed (mph)	44	44	43	39	40	38
85th Percentile Speed (mph)	49	49	48	45	46	44

Collision History

Five-year collision records for July 2019 to July 2024 were provided by WSDOT for SR 522 within the City. The collision records were reviewed to identify if any existing traffic safety issues exist along the corridor. A summary of the total number of reported collisions along SR 522 within the City is provided in Table 2.

Table 2. SR 522 Recent Collision History¹ (July 2019 to July 2024)

Crash Type	Fatality	Serious Injury	Minor Injury	No Injury	Total
Angled Crash	0	0	4	21	25
Bicyclist	0	0	1	0	1
Pedestrian	0	0	0	0	0
Rear End	1	0	31	53	85
Uncategorized	0	1	14	63	78
Total	1	1	50	137	189

1. Collision history provided by the Washington State Department of Transportation.

As shown in Table 2, the most common crash type was rear end collisions, including one fatality within the last five years. Exceeding Reasonable Safe Speed was listed as one of the contributing factors to the fatal collision. Approximately 28% of the total collisions caused one or more injuries.

Figure 2 illustrates how even a small reduction in travel speeds can help decrease the risk of severe injuries and fatalities when collisions occur. Slower travel speeds also decrease the reaction time and braking distance drivers need to avoid collisions entirely.



Figure 2 - The Likelihood of Fatality Increases Exponentially with Vehicle Speed

Roadway Characteristics and Land Use Context

Crossing Point Density

Crossing point density is a key metric to determine the potential for conflicts and collisions on a roadway, as described in the NACTO *City Limits* guidance manual. The NACTO *City Limits*, which the City has adopted as its speed limit setting methodology, considers all intersections and driveways along a roadway to calculate crossing point density. Table 3 shows the number of roadway intersections and commercial, multifamily, and single-family residential driveways along SR 522 in Lake Forest Park and compares this with SR 522 in Kenmore.

Table 3. SR 522 Intersection and Driveway Count

Jurisdiction	Route Miles	Intersections ¹	Commercial Driveways	Multifamily Driveways	Single-Family Driveways	Crossing Point Density ²
Lake Forest Park	2.2	16	22	8	20	30 per mile
Kenmore	2.4	7	65	2	0	31 per mile

1. Intersections measured as number of through intersections and "T" intersections.

2. Crossing point density measured as number of intersections and driveways per mile.

As shown in Table 3, although Kenmore has more commercial driveways along SR 522 than in Lake Forest Park, the overall number of intersections and driveways are very similar in the two jurisdictions. Likewise, the crossing point density is also very similar along SR 522 in these two jurisdictions. This level of crossing point density represents an urban roadway context according to NACTO guidance with frequent potential conflict points where slower speeds should be considered.

The recent speed limit study conducted by WSDOT for the corridor mentioned the higher number of commercial driveways in Kenmore as part of the justification for lowering the speed limit to 35 mph in Kenmore but not in Lake Forest Park. While it is true that commercial driveways tend to have higher traffic volumes than single-family residential driveways, single-family residential driveways present other potential conflicts such as challenging back-in/out maneuvers and loading activity close to the roadway. As mentioned, many of the single-family residential driveways along SR 522 in Lake Forest Park are also visually obscured by trees and fencing.

Comparison of SR 522 in Lake Forest Park, Kenmore, Bothell, and Seattle

As mentioned, WSDOT cited roadway design differences of SR 522 in Lake Forest Park versus in Kenmore and Bothell that led to the decision to lower the speed limit in Kenmore and Bothell to 35 mph and maintain the speed limit in Lake Forest Park at 40 mph. This section reviews the roadway design characteristics of SR 522 in each of these three jurisdictions and Seattle to better understand each segment's similarities and differences.

While Lake Forest Park and Kenmore have almost identical crossing point densities, as described in the previous section, Lake Forest Park's crossing point density is relatively uniform across the City whereas Kenmore's crossing point density is more irregular. Most of the development and driveways on SR 522 in Kenmore are on the north side of the roadway, intersecting westbound traffic primarily. Between 68th Avenue NE and 83rd Avenue NE (a distance of 0.9 miles), eastbound SR 522 conflicts with only 3 signalized intersections and no driveways. Similarly, in Bothell between 83rd Avenue NE and 96th Avenue NE (a distance of one mile), eastbound SR 522 conflicts with no signalized intersections and only two driveways. Thus, both Kenmore and Bothell have longer stretches of SR 522 without crossing point conflicts compared to Lake Forest Park.

The Sound Transit Stride project will install many of the same roadway improvements in the Lake Forest Park segment of SR 522 as currently exist in the Kenmore and Bothell segments. These improvements include raised medians, sidewalks, landscaping (including new street tree plantings), and defined curblines. As WSDOT cited in its recent speed limit study, these types of improvements serve to visually constrain the roadway and provide justification for setting a lower speed limit.

Table 4 summarizes some of the key similarities and differences in roadway design characteristics of SR 522 in Lake Forest Park, Kenmore, Bothell, and Seattle. The similarities shown provide justification for lowering the speed limit to 35 mph throughout Lake Forest Park to more closely align with the speed limit set in nearby jurisdictions. Where Lake Forest Park differs from the other three jurisdictions, the differences are due to features which further support a speed limit

reduction, such as presence of single-family residential driveways and consistent crossing point density.

Table 4. Comparison of SR 522 Roadway Characteristics by Jurisdiction

Criteria	Lake Forest Park	Kenmore	Bothell	Seattle ¹
Existing Posted Speed Limit	40 mph ²	35 mph	35 mph	30 mph
Raised Medians	✓ ³	✓	✓	
Sidewalks (Minimum One Side)	✓ ³	✓	✓	✓
Commercial Driveways	✓	✓	✓	✓
Single-Family Residential Driveways	✓			
Acute Angled Intersections	✓		✓	
0.5+ Mile Segments Without Crossing Points		✓	✓	

1. The roadway characteristics for SR 522 in Seattle shown in the table refer to the segment of SR 522 immediately south of the Lake Forest Park boundary.
2. The southernmost segment of SR 522 in Lake Forest Park (south of NE 153rd Street to the southern City boundary) has an existing posted speed limit of 35 mph.
3. 0.7 miles of SR 522 currently with an unprotected median and no sidewalk in Lake Forest Park will be modified by the Sound Transit Stride project to install raised medians and sidewalks.

Lake Forest Park Safe Speed Study Criteria

As mentioned, Transpo conducted a speed limit study for the City to determine the appropriate speed limit for the City's Minor Arterial and Collector roadways. While the study did not consider SR 522 and SR 104, the same methodology developed for the prior study can be applied to the two state highways as an additional way to evaluate the posted speed limits.

The prior study focused on two primary indices to set speed limits – roadway context and multimodal safety – as recommended in NACTO's *City Limits* guidance. Figure 3 shows the flowchart used to determine the roadway context index.

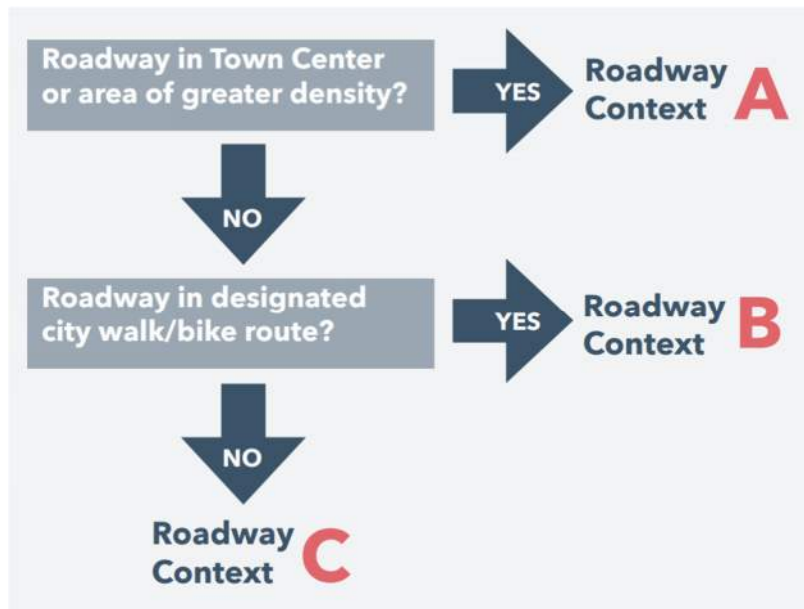


Figure 3 – Flowchart to Determine Roadway Context Index

Based on the City's *Legacy 100-Year Vision* inventory, SR 522 is not considered a walking route in part due to the Burke-Gilman Trail offering a high-quality parallel walking and biking facility. Using this methodology, SR 522 would be Roadway Context C.

Figure 4 shows the scoring criteria for determining the multimodal safety index.



Criteria	Measure	Points	Total Points
Multimodal Activity	Proximity to School	3	 1 >6 pts
	Proximity to Park	2	
	Proximity to Town Center or Neighborhood Business Land Use	2	
Collision History	Roadway has at least one serious injury/fatal collision in last five years	3	 2 3-6 pts
	Roadway has at least one pedestrian or bicycle collision in last five years	1	
Vehicle Speeds	Roadway has 85 percentile speed 3 mph or less of speed limit	3	 3 <3 pts
Daily Traffic	Average Daily Traffic Volumes < 2,000 vehicles	2	
Up to 16 possible points			

Figure 4 – Roadway Multimodal Activity and Safety Index Scoring

Table 5 shows how SR 522 would score based on this multimodal safety index criteria.

Table 5. SR 522 Multimodal Safety Index Score		
Criteria	Measure	Points
Multimodal Activity	Proximity to School	0
	Proximity to Park / Regional Trail	2
	Proximity to Town Center or Neighborhood Business Land Use	2
Collision History	Roadway has at least one serious injury/fatal collision in last five years	3
	Roadway has at least one pedestrian or bicycle collision in last five years	1
Vehicle Speeds	Roadway has 85th percentile speed 3 mph or less of speed limit	0
Daily Traffic	Average Daily Traffic Volumes < 2,000 vehicles	0
Total Points		8

Based on the scoring criteria, SR 522 would score 8 points (index level 1) on the multimodal safety index. Figure 5 shows the resulting speed limit recommendation for each combination of roadway context and multimodal safety indices.

Multimodal Safety Index	Roadway Context		
	A	B	C
1	SPEED 20	SPEED 25	SPEED 25
2	SPEED 25	SPEED 25	SPEED 30
3	SPEED 25	SPEED 30	SPEED 30

Figure 5 – City Limit Speed Setting Matrix for Lake Forest Park

SR 522, with a combination of Roadway Context C and Multimodal Safety Index 1, would be recommended for a 25 mph posted speed limit. However, based on best practice research and national guidance in the MUTCD, the City's Safe Speed Study limits the allowable decrease to no more than 5 mph at one time. For SR 522, this would limit the decrease to 35 mph.

It should be noted that the customized speed limit setting methodology prepared for the City of Lake Forest Park did not consider the context and characteristics of SR 522, which is the City's only multi-lane arterial. If a multilane facility had been anticipated it is likely the methodology would have had additional criteria to reflect the unique functional characteristics of a multilane state highway.

SR 104 Evaluation of Posted Speed Limits

Vehicle Speeds and Volumes

Vehicle speeds and volumes were reviewed along SR 104 and observed over a one-week period in October 2024. Data was collected approximately 150 feet north of NE 190th Street – representing the segment of SR 104 north of 35th Avenue NE – and 600 feet south of 37th Avenue NE – representing the segment of SR 104 south of 35th Avenue NE (see Figure 1 for the data collection locations). The traffic data collection sheets are provided in Attachment A.

Table 6 shows the median and 85th percentile vehicle speeds and average daily traffic (ADT) volumes for SR 104.

Table 6. SR 104 Vehicle Speeds and Volumes

Indicator	SR 104 (North of 35 th Ave)		SR 104 (South of 35 th Ave)	
	Northbound	Southbound	Northbound	Southbound
Posted Speed Limit (mph)	35	35	30	30
ADT (vehicles)	6,900	7,200	7,200	7,700
Median Speed (mph)	35	35	33	35
85th % Speed (mph)	40	40	37	39

As mentioned, the City recently coordinated with WSDOT to reduce the speed limit on SR 104 north of 35th Avenue NE from 40 mph to 35 mph. As shown in Table 6, the median speed for this segment aligns with the adjusted speed limit and the 85th percentile speed is only 5 mph higher than the adjusted speed limit in both directions of SR 104. This speed data indicates a high level of speed limit compliance along this segment of SR 104. Since the City and WSDOT recently reduced the speed limit on this segment and there is a high compliance rate, this study does not consider further reducing the speed limit for SR 104 north of 35th Avenue NE at this time. It is recommended that the City continue to monitor vehicles speeds north of 35th Avenue NE and revisit potential speed limit changes at a future date.

Collision History

Five-year collision records for July 2019 to July 2024 were provided by WSDOT for SR 104 within the City. The collision records were reviewed to identify if any existing traffic safety issues exist along the corridor. A summary of the total number of reported collisions along SR 104 within the City is provided in Table 7.

Table 7. SR 104 Recent Collision History¹ (July 2019 to July 2024)

Crash Type	Fatality	Serious Injury	Minor Injury	No Injury	Total
Angled Crash	0	2	3	7	12
Bicyclist	1	0	1	0	2
Pedestrian	0	0	0	0	0
Rear End	0	1	9	11	21
Uncategorized	0	1	6	15	22
Total	1	4	19	33	57

1. Collision history provided by the Washington State Department of Transportation.

As shown in Table 7, approximately 42% of the total collisions caused one or more injuries. There was also one bicyclist fatality which occurred on the segment of SR 104 north of 35th Avenue NE. However, this fatality occurred before the recent 35 mph speed limit reduction was implemented.

Roadway and Land Use Context

Crossing Point Density

Table 8 shows the number of roadway intersections and commercial, multifamily, and single-family residential driveways along SR 104 both north and south of 35th Avenue NE in Lake Forest Park.

Table 8. SR 104 Intersection and Driveway Count in Lake Forest Park

Segment	Route Miles	Intersections ¹	Commercial Driveways	Multifamily Driveways	Single-Family Driveways	Crossing Point Density ²
n/o 35th Ave NE	0.7	4	6	3	10	33 per mile
s/o 35th Ave NE	1.0	6	3	0	56	65 per mile

1. Intersections measured as number of through intersections and "T" intersections.

2. Crossing point density measured as number of intersections and driveways per mile.

As shown in Table 8, SR 104 in Lake Forest Park south of 35th Avenue NE has almost twice the crossing point density as SR 104 north of 35th Avenue NE. Due to the frequent conflict points and single-family land use context along the SR 104 segment south of 35th Avenue NE, the City is justified in considering an alternative speed limit compared to the segment of SR 104 north of 35th Avenue NE.

Lake Forest Park Safe Speed Study Criteria

The analysis shown in this section applied the same methodology developed for the prior Lake Forest Park Safe Speed Study.

Based on the City's *Legacy 100-Year Vision* inventory, SR 104 is considered a walking route. Using the Safe Speed Study methodology shown in Figure 3, SR 104 would be considered Roadway Context B.

Table 9 shows how SR 104 would score based on the multimodal safety index criteria shown in Figure 4.

Table 9. SR 104 Multimodal Safety Index Score

Criteria	Measure	Points
Multimodal Activity	Proximity to School	3
	Proximity to Park	0
	Proximity to Town Center or Neighborhood Business Land Use	2
Collision History	Roadway has at least one serious injury/fatal collision in last five years	3
	Roadway has at least one pedestrian or bicycle collision in last five years	1
Vehicle Speeds	Roadway has 85th percentile speed 3 mph or less of speed limit	0
Daily Traffic	Average Daily Traffic Volumes < 2,000 vehicles	0
Total Points		9

Based on the scoring criteria, SR 104 would score 9 points (index level 1) on the multimodal safety index. A combination of Roadway Context B and Multimodal Safety Index 1 would indicate a 25 mph speed limit south of 35th Avenue NE would be appropriate for SR 104.

Study Findings

SR 522

The key findings of the speed limit evaluation for SR 522 in Lake Forest Park are:

- Approximately 28% of collisions on SR 522 in Lake Forest Park caused one or more injuries, including one fatality, in the last five years.
- The crossing point density of SR 522 in Lake Forest Park is almost identical to that of SR 522 in Kenmore, which currently has a 35 mph speed limit.
- The roadway design characteristics of SR 522 in Lake Forest Park are similar to those of SR 522 in Kenmore and Bothell, including features that visually constrain the roadway such as raised medians, sidewalks, and landscaping. The Sound Transit Stride project will install additional multimodal features which will further align the design of SR 522 in the three jurisdictions.
- The roadway design characteristics of SR 522 in Lake Forest Park further support a lower speed limit such as the presence of single-family residential driveways and consistent crossing point density.
- Based on the Lake Forest Park Safe Speed Study speed limit setting methodology, SR 522 in Lake Forest Park would receive a 35 mph speed limit recommendation.

Table 10 summarizes the speed limit evaluation for SR 522 in Lake Forest Park based on the identified criteria in this study.

Table 10. Evaluation of Speed Limit on SR 522 in Lake Forest Park¹

	Field Condition	Speed Limit Supported?	
		35 mph	40 mph
85th Percentile Speed ²	45 - 50 mph	-	✓
Crossing Point Density	30 per mile	✓	-
Visually Constrained Roadway ³	Yes	✓	-
Lake Forest Park Safe Speed Study Criteria			
Proximity to Park	Yes	✓	-
Proximity to Town Center/Neighborhood Business Use	Yes		
At least one serious/fatal injury in last five years	Yes		
At least one pedestrian/bicycle collision in last five years	Yes		

1. It should be noted that a speed limit does not need to meet all criteria for a location to be selected. A speed limit which aligns with more than one criterion typically indicates a more appropriate speed limit. However, engineering judgement and best practice guidance was used to provide additional weight to some criteria in the recommendation of the speed limit for the corridor.

3. Based on 2024/2025 speed study for both the northbound and southbound directions.

2. Based on presence of or planned raised medians, sidewalks, visually obscured driveways due to trees and fencing, and acute angled intersections.

SR 104

The key findings of the speed limit evaluation for SR 104 in Lake Forest Park are:

- Approximately 42% of collisions on SR 104 in Lake Forest Park caused one or more injuries, including one fatality (north of 35th Avenue NE), in the last five years.
- The crossing point density of SR 104 south of 35th Avenue NE is almost twice that of SR 104 north of 35th Avenue NE.
- Based on the Lake Forest Park Safe Speed Study speed limit setting methodology, SR 104 in Lake Forest Park would receive a 25 mph speed limit recommendation south of 35th Avenue NE.

Table 11 summarizes the speed limit evaluation for SR 104 in Lake Forest Park based on the identified criteria in this study.

Table 11. Evaluation of Speed Limits on SR 104 in Lake Forest Park¹

Criteria	South of NE 185th St		
	Field Condition	Speed Limit Supported?	
		25 mph	30 mph
85th Percentile Speed ²	35 - 40 mph	-	✓
Crossing Point Density	65 per mile	✓	-
Lake Forest Park Safe Speed Study Criteria			
Proximity to School	Yes		
Proximity to Town Center/Neighborhood Business Use	Yes	✓	-
At least one serious/fatal injury in last five years	Yes		
At least one pedestrian/bicycle collision in last five years	Yes		

1. It should be noted that a speed limit does not need to meet all criteria for a location to be selected. A speed limit which aligns with more than one criterion typically indicates a more appropriate speed limit. However, engineering judgement and best practice guidance was used to provide additional weight to some criteria in the recommendation of the speed limit for the corridor.

2. Based on 2024 speed study for both the northbound and southbound directions.