



Disability Services
Safety and Claims Management
Department of Executive Services
Human Resources Management Division
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JOB ANALYSIS SUPPLEMENT FOOT FUNCTIONS

Job Title:	Transit Operator	DOT Title:	Bus Driver (motor trans.)
SVP:	4	DOT #:	913.463-010
Location of Analysis:		Name of Employee:	
Analyst:	Kyle Pletz, VRC, CDMS	JA Source:	Laura Merritt
Presenting VRC:		Employer Contact:	Dennis Lock
Date Analysis Completed:	11/19/19	Supervisor Contact Information	Phone: 206-477-7233 E-mail: dennis.lock@kingcounty.gov

Operating Controls with Feet Dominant Foot: Right X Left X

Continuously for 2 hours at a time for up to 8 hours total in a work shift while driving the bus. Must be able to depress the accelerator as well as the air brake pedal continuously.

Brief description of which positions are required and which tasks are performed in each position:

King County Metro operates several different makes and models of buses, with operator foot controls described as follows: The driver's right foot rests on the floor, a raised plate or heel cups directly in front of the throttle and brake pedals. The driver will operate each pedal independently of one another, requiring movement of the foot from one pedal to the other. The driver seat adjusts forward and back as indicated to provide a range of distances. The measured maximum force to fully engage the brake system at fully charged status is the maximum force required, obtained through 3 measurement trials at both quick and slow application.

Frequency and duration of pressure application will vary by route and bus. Measurements include replication of panic stop from 20 mph with 3 seconds of severe application, to measured stops taking 5 -10 seconds to make a smooth, controlled stop on level ground at speeds of 5 and 20 mph. Retarder function allows for the transmission to assist in the braking application at speeds above 8 mph. under normal braking conditions. All busses have some sort of retarder at this time. There are now electric mode busses with the dynamic braking system coupled with the air brakes, with a reduction in overall weight of the coach due to this conversion, brake force pressures are actually slightly less.

It is noted that there are many elements that can affect the total brake pedal force needed when operating a coach. Gross vehicle weight can vary based upon occupancy, fuel level etc. Wear stages of brake pads and components; driving on inclines or declines can also affect the amount of force that an Operator may need to use in a shift.

Some coaches have hill holder mode, which is activated by depressing the brake pedal with 20 lbs. of force for three seconds. It is deactivated by depressing the accelerator pedal.



King County

King County Job Analysis Completed on: 7/1/16

Employee:

DOT #: 913.463-010

Job Title: Transit Operator

Claim #:

Bus Make/Model	Throttle-Brake Lateral Distance	Degree of Pedal Pronation	Brake Pedal Neutral Angle	Brake Pedal Max Angle
2800 60' New Flyer	5"	10	43	25
4500 60' New Flyer	5"	10	43	25
4300 40' New Flyer	5"	10	43	25
6000 60' New Flyer	5"	10	43	25
6200 60' New Flyer	5"	10	43	25
7000 40' Orion	5"	10	43	25
8000 60' New Flyer	5"	10	43	25

Bus Make/Model	Close seat pan to pedal tip distance	Far seat pan to pedal tip distance	Average Peak Force under gradual stopping (5-10 sec duration)	Average Peak Force – Panic Stop (1-3 sec duration)
2800 60' New Flyer	18.5" (no sliding pedals)	26" (no sliding pedals)	15-20 lbs.	53.5 lbs.
4500 60' New Flyer	18.5" (with 3" sliding pedals)	26" (with 3" sliding pedals)	15-20 lbs.	53.5 lbs.
4300 40' New Flyer	18.5" (with 3" sliding pedals)	26" (with 3" sliding pedals)	15-20 lbs.	53.5 lbs.
6000 60' New Flyer	18.5" (with 3" sliding pedals)	26" (with 3" sliding pedals)	15-20 lbs.	53.5 lbs.
6200 60' New Flyer	18.5" (with 3" sliding pedals)	26" (with 3" sliding pedals)	15-20 lbs.	53.5 lbs.
7000 40' Orion	18.5" (with 3" sliding pedals)	26" (with 3" sliding pedals)	15-20 lbs.	53.5 lbs.
8000 60' New Flyer	18.5" (with 3" sliding pedals)	26" (with 3" sliding pedals)	15-20 lbs.	53.5 lbs.

Turn signals on the 4500 60' Tolley and 8000 60' Coach are operated with the left foot utilizing 5 lbs. of force. The signal buttons are mounted on a raised platform.

Turn Signals on the Orion 7000 are operated with with the left foot, utilizing floor mounted buttons that take 9-10 lbs. of pressure to operate.



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Analyst's Comments:

Empty rectangular box for analyst's comments.

Possible Employer Modifications:

Assistance can be called in for chain installation and use of sand. Assistance can be called in to push wheelchairs up the ramp. Assistance is available to open or close roof vents/emergency exits.

Note: The information for this job analysis was gathered by either on-site observation, interview and / or is representative of the labor market as indicated on page one. Additional data may have been obtained from standardized industry resources such as the DOT, GOE, COJ, OOH, WOIS and O-NET. On occasion, practicality and feasibility prevent the direct observation and/or gathering of objective, quantifiable data. For this reason, a "best estimate" may have been used.

Analyst:

Presenting VRC signature:

Vocational Consultant

Date

Vocational Consultant

Date

Employer Verification:

Employee Verification: (optional)

Name

Date

Name

Date



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MEDICAL PROVIDER:

I agree that the employee can perform the physical activities described in this job analysis and can return to work.

State date employee is released to return to work if different from today's date _____

I agree the employee can perform the described job but only with modifications (describe in comments section). Modifications are needed on a permanent or temporary basis.

The employee **temporarily** cannot perform this job based on the following physical limitations:

Anticipated release date: _____

Treatment plan: _____

The employee is **permanently** restricted from performing the physical activities described in this job analysis based on the following physical limitations (state objective medical findings):

Comments:

Signature

Date

Print Name

- Attending Physician Consulting Physician Pain Program Physician
- IME Physican PCE Therapist OT / PT Therapist
- PEP Physician