

**Table 3.23.6 Distribution of Wheel Loads in Longitudinal Beams for Calculation of Shears in Interior Longitudinal Stringers**

Kind of Floor	Bridge Designed for One Traffic Lane	Bridge Designed for Two or More Traffic Lanes	Range of Applicability <sup>j</sup>
Timber:	Use footnote f	Use footnote f	N/A
Concrete:			
On Steel I-Beam Stringers, Prestressed Concrete Girders, and Concrete T-Beams <sup>g</sup>	$0.6 + \frac{S}{15'}$ If $N_b < 4$ , use footnote f.	$0.4 + \frac{S}{6'} - \left(\frac{S}{25'}\right)^2$	$3'-6'' \leq S \leq 16'-0''$ $N_b \leq 4$
On Concrete Box Girder <sup>h</sup>	$\left(\frac{S}{4'}\right)^{0.6} \left(\frac{d}{L}\right)^{0.1}$	$\left(\frac{S}{3.4'}\right)^{0.9} \left(\frac{d}{L}\right)^{0.1}$	$6' \leq S \leq 13'$ $20' \leq L \leq 240'$ $3' \leq d \leq 9'$ $N_c \leq 3$
On Prestressed Concrete Spread Box Beams <sup>g</sup>	$\left(\frac{S}{4.4'}\right)^{0.6} \left(\frac{d}{L}\right)^{0.1}$	$\left(\frac{S}{3.1'}\right)^{0.8} \left(\frac{d}{L}\right)^{0.1}$	$6' \leq S \leq 11'-6''$ $20' \leq L \leq 140'$ $1'-6'' \leq d \leq 5'-6''$ $N_b \leq 3$
Precast Box Beams Used in Multi-Beam Decks <sup>g</sup>	$1.15 \left(\frac{b}{L}\right)^{0.15} \left(\frac{I}{J}\right)^{0.05}$ or $1.15 \left(\frac{b}{L}\right)^{0.15}$	$\left(\frac{b}{3.2'}\right)^{0.4} \left(\frac{b}{L}\right)^{0.1} \left(\frac{I}{J}\right)^{0.05}$ or $\left(\frac{b}{3.2}\right)^{0.4} \left(\frac{b}{L}\right)^{0.1}$	$3' \leq b \leq 5'$ $20' \leq L \leq 120'$ $5 \leq N_b \leq 20$ $25,000 \leq J \leq 610,000 \text{ in}^4$ $40,000 \leq I \leq 610,000 \text{ in}^4$
Precast Beams Other Than Box Beams Used in Multi-Beam Decks	Use footnote f.	Use footnote f.	N/A
Steel Grid:	Use footnote f.	Use footnote f.	N/A

For footnotes see Table 3.23.1.