ERRATA

NCHRP Report 797 and NCHRP Web-only Document 205

Following the publication of *NCHRP Report 797* ("Guidebook") and *NCHRP Web-only Document 205* ("Final Report")*,* it was brought to the research team's attention that the count data provided to the research team from the one piezoelectric strip counter included in the study had not been adjusted for daylight savings time and, therefore, the count data were shifted by one hour when being compared to the video ground-truth data. The analysis has been re-run with the correct times used. The revised analysis shows that the counter was both highly accurate and precise. The research team continues to advise that, although promising, these results are based on a single device, and that further research on piezoelectric strips is recommended. The following indicates the locations in the reports that should be updated with the new results:

Guidebook, p. 37, Table 3-2. Change the user volume for piezoelectric strips to "+++".

Guidebook, p. 60, Table 4-1. Change the piezoelectric strips row to:

Sensor Technology	APD	AAPD	Pearson's R	Hours of Data	Hourly Volume (Average /Maximum)
Piezoelectric Strips	-1.46%	2.57%	0.9966	51	129 / 283

Guidebook, p. 62, Table 4-2; Final Report, p. 10, Table S-3; and Final Report, p. 177, Table 4-16. Change the piezoelectric strips row to:

Sensor Technology	Adjustment Factor	Hours of Data
Piezoelectric Strips	1.017	51

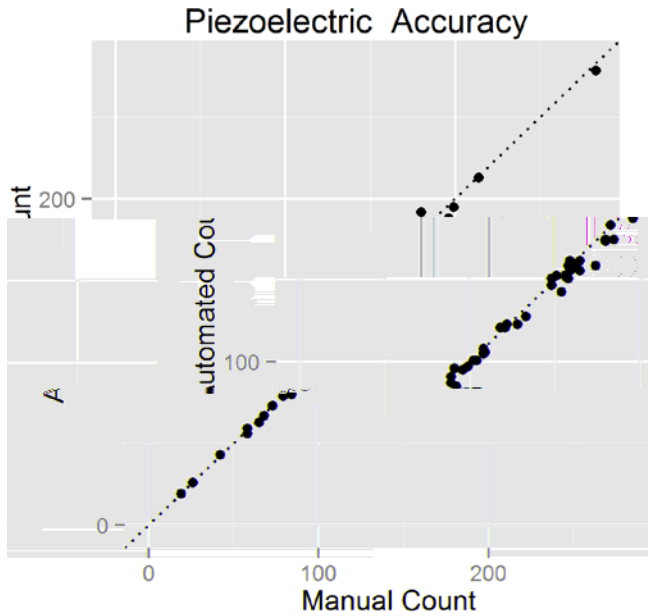**Guidebook, p. 63, Table 4-3.** Replace the two piezoelectric rows with the following single row:

Technology	Automated Count	Automated Count^2/10^4	Facility Width (ft) × Automated Count	Temperature (^{o}F) × Automated Count	AIC
Piezoelectric	1.017	---	---	---	296

Guidebook, p. 64. Change the second sentence of the second paragraph of regular text to begin: "However, the more complicated correction functions in Table 4-3 are recommended to be considered for higher volume sites when using passive infrared sensors, active infrared sensors, and inductive loops;…"

Guidebook, p. 92: Change the "Maximum User Volume" information in the shaded box to read: "One counter was tested by NCHRP 07-19, with accurate and precise results up through 200 bicyclists/hour. No upper bound on maximum user volume was established."

Guidebook, p. 92, Section 5.8.6. Change the paragraph to read "NCHRP 07-19 tested one piezoelectric strip counter on a paved multi-use trail. The APD, representing the overall divergence from perfect accuracy across all data collected, was -1.46%. The AAPD, representing the counter's consistency, was 2.57%. Figure 5-5 graphs the counter's accuracy and precision."

Guidebook, p. 93, Figure 5-5; and Final Report, p. 170, Figure 4-15. Replace the figure with the following:

Final Report, p. 5, Table S-1; and p. 140, Table 3-6. Change the piezoelectric strips column as follows:

Condition	Piezoelectric Strips
Hours of video	51
Temperature (°F) (mean/SD)	72 / 10
Hourly user volume (mean/SD)	129 / 52
Nighttime hours	3
Rain hours	0
Cold hours (<30 °F)	0
Hot hours (>90 °F)	3
Thunder hours	0

Final Report, p. 7, Table S2. Change the piezoelectric strips row as follows:

Sensor Technology	APD	AAPD	WAPD	r	Hours	Volume (Average/Max)
Piezoelectric strips	-1.46%	2.57%	-1.66%	0.9966	51	129 / 283

Final Report, p. 9. Change the last sentence of the "Piezoelectric Strips" section to read:

"Results from this sensor showed average undercounting of 1.46% and very minimal spread in the accuracy of the device."

Final Report, p. 170. Change the "Accuracy Description" to read:
"The one piezoelectric device included in the study appears to be functioning both very accurately and consistently, with the vast majority of the observed hours demonstrating nearly perfect accuracy. Table 4-11 provides the accuracy and consistency statistics for this device."

Final Report, p. 170, Table 4-11. Update the table as follows:

Site	APD	AAPD	WAPD	r	N	Average Hourly Volume
Four Mile Run	-1.46%	2.57%	-1.66%	0.9966	51	129

Final Report, p. 170. Change the "Regression Corrections" section to read:

"Table 4-12 shows the correction functions estimated for the one piezoelectric strip counter tested in this study. The recommended correction function for this device includes only the automated count on the basis of significant parameter estimates, a low AIC, and no prediction of non-zero volumes based on observed automated counts of zero. Inclusion of other terms in the model results in a poor fit and insignificant parameter estimates for those terms, suggesting that the automated count itself is a very good representation of the true volume."

Final Report, p. 171, Table 4-12. Replace the four table rows with the following three:

Intercept	Automated	Automated^2/10^4	AIC
---	1.017 (0.000)	---	296
-0.033 (0.984)	1.017 (0.000)	---	298
---	1.022 (0.000)	-0.334 (0.714)	297

Final Report, p. 176, Table 4-15. Update the piezoelectric row as follows:

Technology	Subset	APD	AAPD	WAPD	r	N	Average Hourly Volume
Piezoelectric	All data	-1.46%	2.57%	-1.66%	0.9966	51	129

Final Report, p. 178. Change the piezoelectric strips bullet to read:

"**Piezoelectric Strips.** Found to have an undercounting rate of 1.46% and a total deviation from actual counts of 2.57%."