

## Error Impact Score and Word Error Rate Measures for the Study Scenarios

Results for reference:

### EYE DOCTOR

Reading impact\_scores\eye\_eye2\_impact.txt ...

Total phrases: 27

Impacted phrases: 16

Highly impacted phrases: 11

% Impacted phrases: 59.26

% Highly impacted phrases: 40.74

Mean impact score for phrases with substitution errors: 0.8207200184402788

Reading impact\_scores\eye\_15eye\_impact.txt ...

Total phrases: 27

Impacted phrases: 18

Highly impacted phrases: 18

% Impacted phrases: 66.67

% Highly impacted phrases: 66.67

Mean impact score for phrases with substitution errors: 1.068536934832178

### GLOBAL TRAVEL

Reading impact\_scores\global\_transcript1\_impact.txt ...

Total phrases: 35

Impacted phrases: 17

Highly impacted phrases: 13

% Impacted phrases: 48.57

% Highly impacted phrases: 37.14

Mean impact score for phrases with substitution errors: 0.7209664029945699

Reading impact\_scores\global\_diptanuGlobaltravel\_impact.txt ...

Total phrases: 35

Impacted phrases: 28

Highly impacted phrases: 22

% Impacted phrases: 80.0

% Highly impacted phrases: 62.86

Mean impact score for phrases with substitution errors: 0.8707951062068218

## **TAKEOUT**

Reading impact\_scores\ref10\_takeout10\_impact.txt ...

Total phrases: 35

Impacted phrases: 19

Highly impacted phrases: 17

% Impacted phrases: 54.29

% Highly impacted phrases: 48.57

Mean impact score for phrases with substitution errors: 0.8048606141947726

Reading impact\_scores\ref10\_diptanuTakeout\_impact.txt ...

Total phrases: 35

Impacted phrases: 23

Highly impacted phrases: 18

% Impacted phrases: 65.71

% Highly impacted phrases: 51.43

Mean impact score for phrases with substitution errors: 0.9523709563197332

## **CAR REPAIR**

Reading impact\_scores\ref3\_new7\_impact.txt ...

Total phrases: 28

Impacted phrases: 15

Highly impacted phrases: 13

% Impacted phrases: 53.57

% Highly impacted phrases: 46.43

Mean impact score for phrases with substitution errors: 0.6492556875207783

Reading impact\_scores\shorterCar\_diptanuCar\_impact.txt ...

Total phrases: 30

Impacted phrases: 23

Highly impacted phrases: 21

% Impacted phrases: 76.67

% Highly impacted phrases: 70.0

Mean impact score for phrases with substitution errors: 0.7819264929627656

Scenario	Measures			
	Impacted Phrases	Phrases with Impact >.50	Mean Impact Score for Phrases with Substitution Errors	WER
Global Travel				
More accurate (Donna reduced script)	48.57	37.14	0.71905	6.1%
Less accurate (Diptanu recording 2)	80.0	62.86	0.87079	14.1%
Eye Doctor Visit				
More accurate (Donna recording 2)	59.26	40.74	0.82072	5.5%
Less accurate (Diptanu 15% noise)	66.67	66.67	1.06853	11.7%

Error Impact Score and Word Error Rate Measures for the Study Scenarios (Continued)

Scenario	Measures			
	Impacted Phrases	Phrases with Impact >.50	Mean Impact Score for Phrases with Substitution Errors	WER
Car Repair				
More accurate (Donna Car repair #7)	53.57	46.43	0.64930	4.0%
Less accurate ( Car Repair Diptanu	76.67	70.0	0.78192	9.4%
Takeout				
More accurate (Donna #10)	54.29	48.57	0.80486	5.5%
Less accurate (Diptanu)	65.71	51.43	0.95237	11.7%