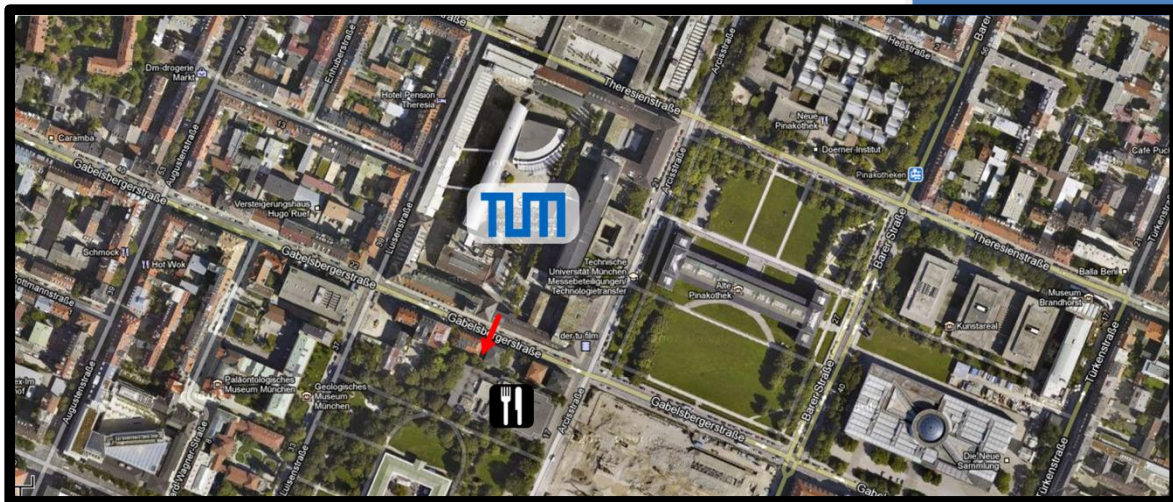


STARS PROJECT 2012

Gabelsbergerstraße

Unsafe Street Crossing



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Munich

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Appendix I: Online Survey

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Background

This report is a part of an EU-wide, open competition for students, sponsored by the European Transport Safety Council (ETSC). The name of the competition is Students Acting to Reduce Speed (STARS) and the main objective is for participating student teams to learn how to conceive, develop, and execute a local, low-cost, and easy-to-implement speed management project.

Project Area

The unsignalized crossing on Gabelsbergerstraße between the main Campus of Technische Universität München (TUM) and its Canteen was identified by the TUM Student Team as a potential speed management project area (**Figure 1**). Anecdotal evidence, personal experience and site visits revealed that pedestrians felt unsafe while crossing Gabelsbergerstraße at this point.

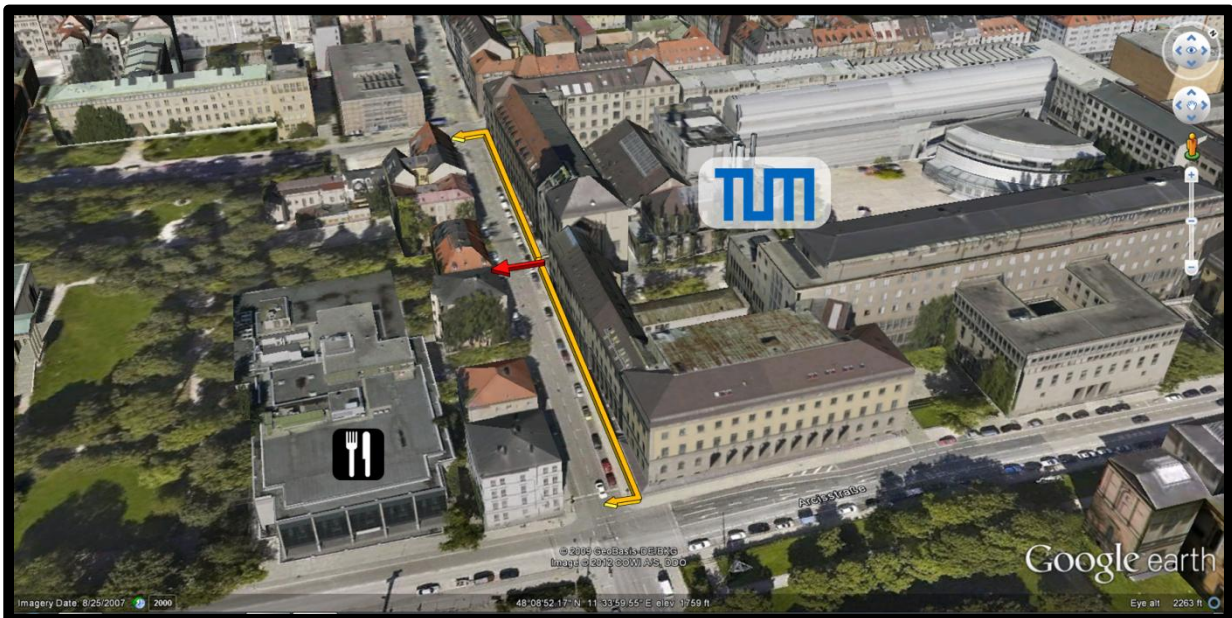


Figure 1

Site Details

Traffic flows one way on Gabelsbergerstraße from West to East along two traffic lanes. There is on-street parking allowed on both sides of the street. These parking spots tend to be constantly occupied. The maximum allowed speed on the street is 50 km/hr.

Problem Description

The main speed and safety problem in this area is that pedestrians tend to cross Gabelsbergerstraße at an unsignalized crossing despite the fast moving vehicular traffic. As shown in **Figure 1**, pedestrians cross approximately in the middle of the block, an area which tends to be the place of the highest traffic velocity. Pedestrian movements are high (particularly during peak lunch hour) given that this unsignalized crossing serves as the shortest path for TUM's students, faculty, and staff between the university's main campus and the Canteen (**Figure 2**). Although there are two pedestrian-friendly intersections nearby, they are 120 meters and 100 meters away from the most direct path across. Car drivers have the right of way but are not aware or warned about the high number of pedestrians crossing the street at this point (particularly during Canteen opening hours) (**Figure 3**).



Figure 2



Figure 3

As it is shown in **Figure 4** and **Figure 5**, given that parking is allowed on both sides of the street next to the unsignalized crossing, pedestrian visibility and line-of-sight for both pedestrians and car drivers is limited. Pedestrians have to literally step onto the street to see if there are cars approaching before they can cross. Although the crossing of pedestrians should be forbidden at this point and pedestrians should be redirected to the nearest signalized intersections, it is not possible due to the university access roads and gateway in the area which creates a natural crossing for pedestrians.



Figure 4

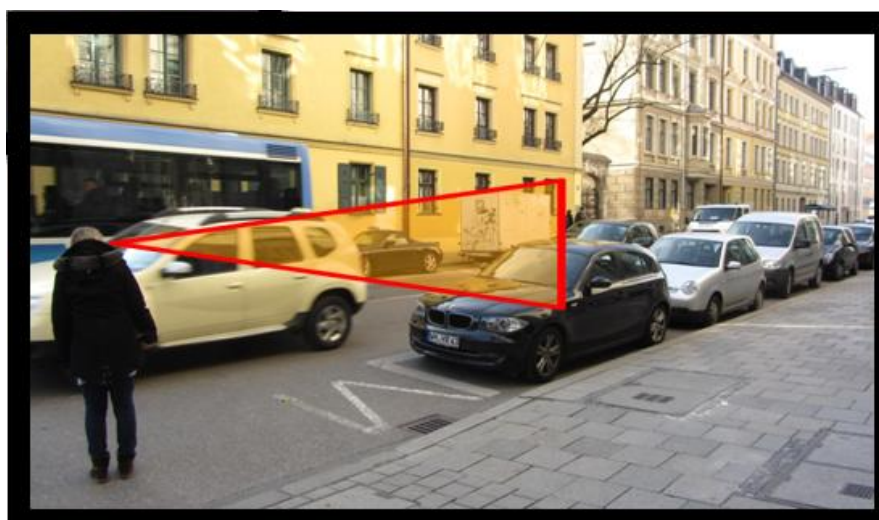


Figure 5

Preliminary Research/Measurements Performed

No public data regarding accident rates in this area was available. Thus in order to corroborate the assumptions regarding pedestrians' perception of safety while crossing, preliminary research and measurements needed to be performed. This included the creation of a brief online survey (please see **Appendix I**) which was answered by 225 individual participants, out of which 95, or approximately 42.2% of the participants, felt unsafe or very unsafe while crossing Gabelsbergerstraße at the unsignalized crossing. Cross-tabbing results indicated that the majority of these 95 pedestrians did not feel safe crossing at this point particularly during peak lunch hour of 12:00 to 13:00 as seen in **Figure 6**. Survey results can be found in **Appendix II**. Of special notice is that seven survey participants (3.2%) indicated that they had seen or been involved in an accident while using the unsignalized crossing. Special thanks go out to TUM's Student Union (Allgemeiner Studentischer Ausschuss or AStA) for their assistance with the electronic survey distribution.

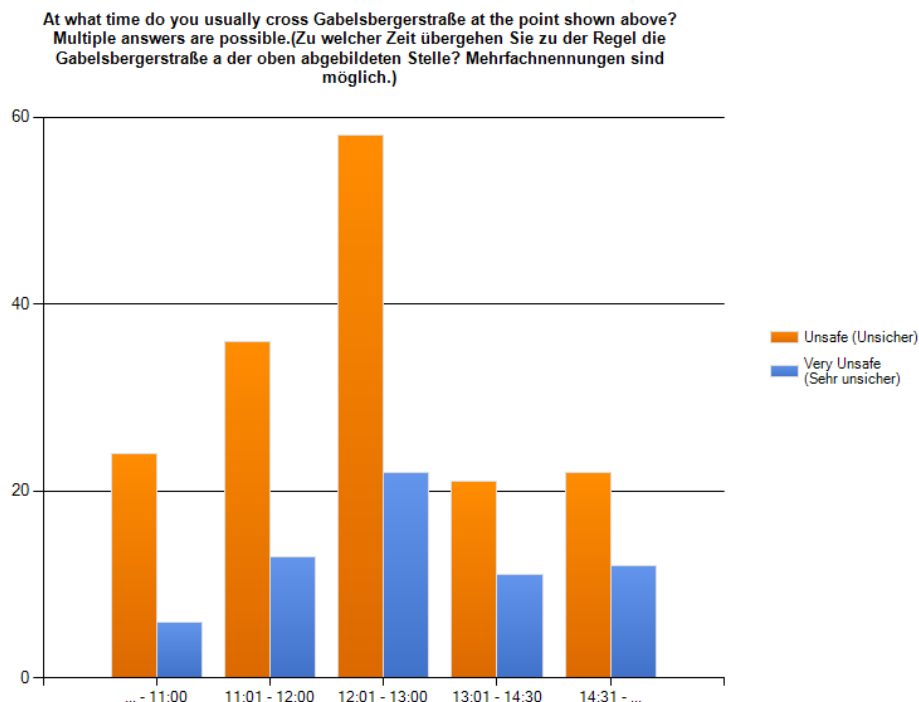


Figure 6

Preliminary speed measurements were performed using equipment specially commissioned by the Chair of Traffic Engineering and Control at the Technische Universität München. The

equipment, called "CAT-Traffic Kennzeichenerfassungssystem", consists of two sets of components. Each set consists of a number plate recognition camera, a data processor which receives the signals from the number plate recognition camera, and a portable computer for data storage. In order to perform the speed measurement, the equipment was installed upstream and downstream of the unsignalized crossing (**Figure 7**). The first camera (upstream of the crossing) detects the number plates of cars passing by on a specific segment of the road and records the number plate along with a time of detection. The second camera then records the same data, but downstream of the intersection with new times. The results of the measurements are number of cars and the time it takes to travel a specific distance from location one to location two, thus allowing for velocity calculation. Due to a data and privacy protection laws in Germany, number plates were stored in a coded way.

The preliminary speed measurement results were a bit disheartening given that they indicated that the majority of vehicles travel in the 25 - 30 km/hr range (**Figure 8**). However, given that there was high perception of lack of safety from the pedestrian point of view and that the measurement devices were most likely placed too close together (given the high number of speed measurements that needed to be discarded due to discrepancies in plate recognition matching), new measurements needed to be made. Special thanks go out to Martin Margreiter of TUM's Traffic Engineering and Control Department for lending the TUM Student Team the measurement equipment and for his support with the interpretation of the speed measurement data.



Figure 7

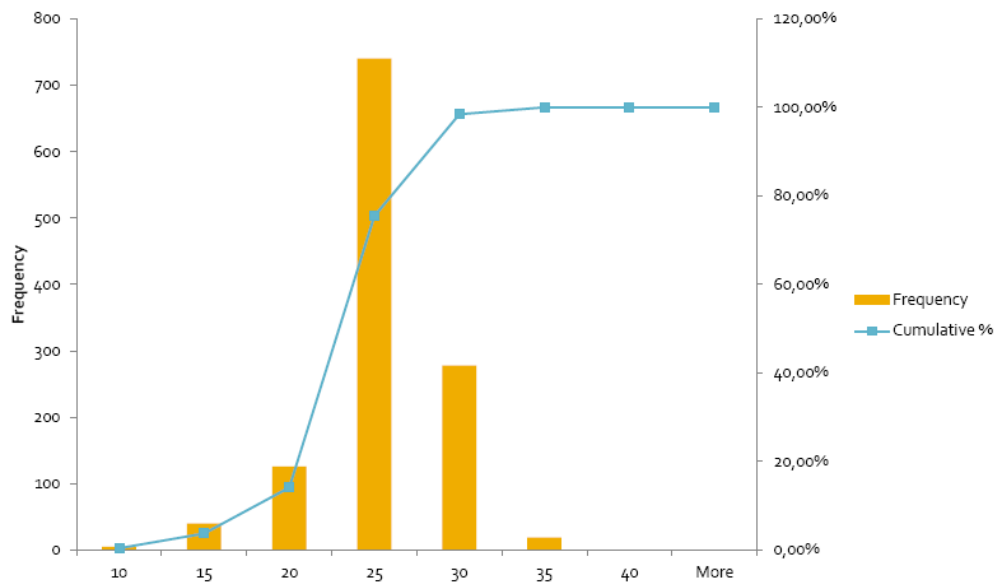


Figure 8

Project

Based on preliminary research, measurements, and site visits, the TUM Student Team identified four main problems in the Gabelsbergerstraße unsignalized crossing project area:

1. Perceived pedestrian danger
2. Lack of information for drivers regarding pedestrians traversing at an unsignalized crossing between two signalized intersections
3. Limited line-of-sight due to parked cars
4. Potentially unsuitable traffic speed

Initial Idea

The team's initial idea to improve this crossing was somehow improve the drivers' awareness of the pedestrians crossing. Some of the initial ideas discussed included installing horizontal markings ("zebra stripes") (**Figure 9**), permanently reorganizing the parking around the unsignalized crossing, and installing solar powered, flashing, pedestrian detections signals (**Figure 10**).



Figure 9



Figure 10

Research regarding German traffic regulations, the City of Munich municipal code, and cost estimation was performed in order to assess the feasibility of the aforementioned idea.

Proposed Solution

Based on the research results, a revised proposal was made. The revised idea was to install equipment and signage at the site in cooperation with the City of Munich. The equipment and signage would consist of 1) removal of parking spaces for increased line-of-sight (**Figure 11**), 2) extended sidewalks at the unsignalized crossing to reduce perceived pedestrian danger, and 3) a temporal speed limit of 30 km/hr every working day from the opening of the Canteen to 30 minutes after closing in order to warn drivers of pedestrians crossing as well as to reduce potentially unsafe traffic speed during high pedestrian crossing volumes.

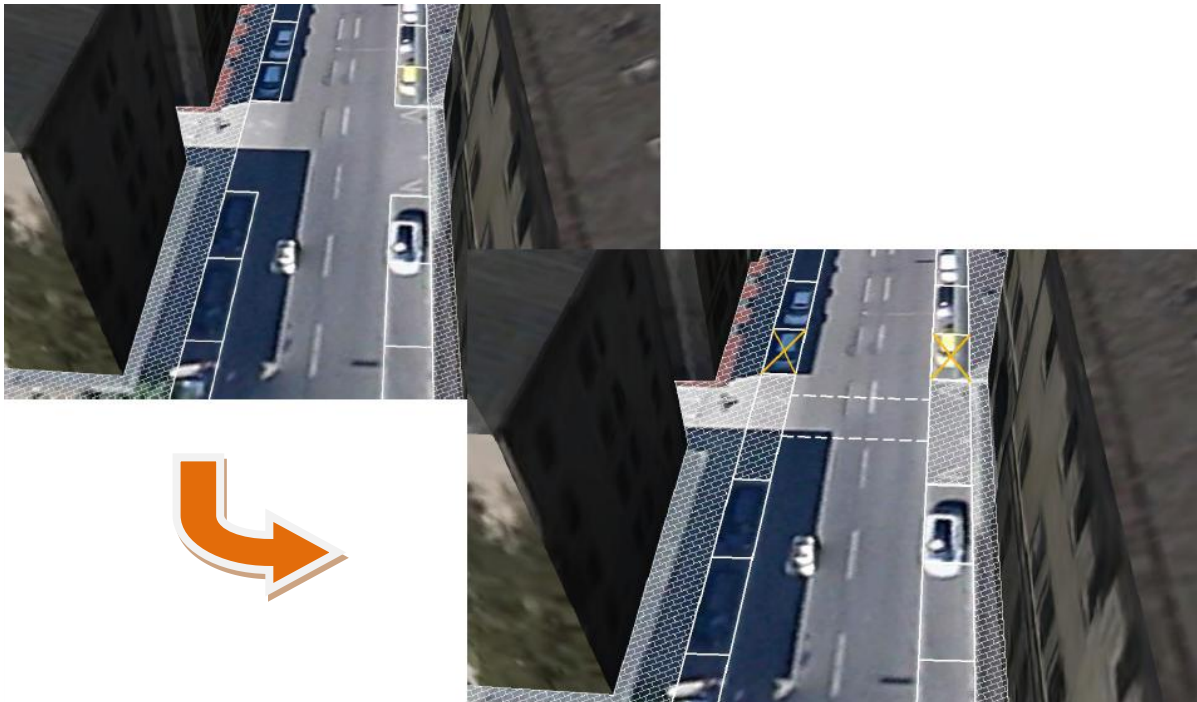


Figure 11

The revised proposed project would be able to answer the following questions:

1. Is it possible to improve traffic safety by simply installing street signs and not changing street infrastructure?
2. Would temporary signage and equipment reduce speed and improve safety thus warranting a more permanent solution?
3. Does the proposed solution meet the speed management goals of the STARS project?

Implementation

The search for the right contact persons in the City Council of Munich and the implementation of the project from concept to reality was slow and difficult mainly due to two facts, language barrier and strict German laws and procedures. We found the assistance of TUM's Chair of Traffic Engineering and Control, Univ.-Prof. Dr.-Ing. Fritz Busch, invaluable in order to obtain a contact point at the City's Department of Traffic and City Planning. In addition, Dr. Fritz Busch provided us with solid technical advice and tips regarding our project before arranging for us an introduction with the City of Munich.

In cooperation with Mr. Robert Neuner and the City of Munich, equipment and signage were installed at the project site after many discussions, multiple meetings, and different proposals. In exchange for assuming all costs associated with the installed temporary signage, the City of Munich only required a report outlining the final results of implementation.

The final project implementation consists of: 1) new signage upstream of the unsignalized crossing which redirects drivers' attention to pedestrians crossing (**Figure 12**).



Figure 12

2) New signage reducing speed limit from 50 km/hr to 30 km/hr Monday to Friday during peak lunch hour traffic (10:00 - 12:00) (**Figure 13**). The temporal limit is based on working hours of the University Canteen, the results of the online survey, and speed measurements.



Figure 13

3) Temporary signage prohibiting parking near the unsignalized crossing during the main hours of pedestrian movement from campus to canteen and viceversa (10:00 - 13:00) (**Figures 14, 15, and 16**). A third round of speed measurements and a more in-depth traffic flow analysis of the project area will be performed. Based on these results, the City Department of Traffic will make a decision whether to make the temporary removal the parking places permanent or restore the previous regulations.



Figure 14



Figure 15



Figure 16

Although no extension of sidewalks was made (due to cost and logistics), as seen in **Figure 16**, the removal of parking places on both sides of the pedestrian crossing has resulted in augmented line-of-sight for both pedestrians as well as for the car drivers. Thereby creating a better sense of safety for those utilizing the unsignalized crossing as desired by the project team with the original sidewalk extension idea.

Speed Measurements After Implementation

Speed measurements were made at two locations as shown in **Figure 17**. Location A is approximately 230 meters upstream of the unsignalized crossing and Location B is the project area. The locations of measurements were chosen in order to compare the change of traffic velocity in the adjacent street section which has similar characteristics to the project area and in order to determine the effect of the installed signage. Although there is a signalized intersection in between, it was concluded its effect is greatly reduced given the green wave traffic signal coordination system implemented in the area. Measurements were made with the Bushnell Speed Radar Gun - Model 1019x. The working range of the radar gun is approximately 400 m. The accuracy of radar gun is ± 2 km/hr. The original license plate recognition speed measurement camera system was not available given that it was deployed at another project site at the time.

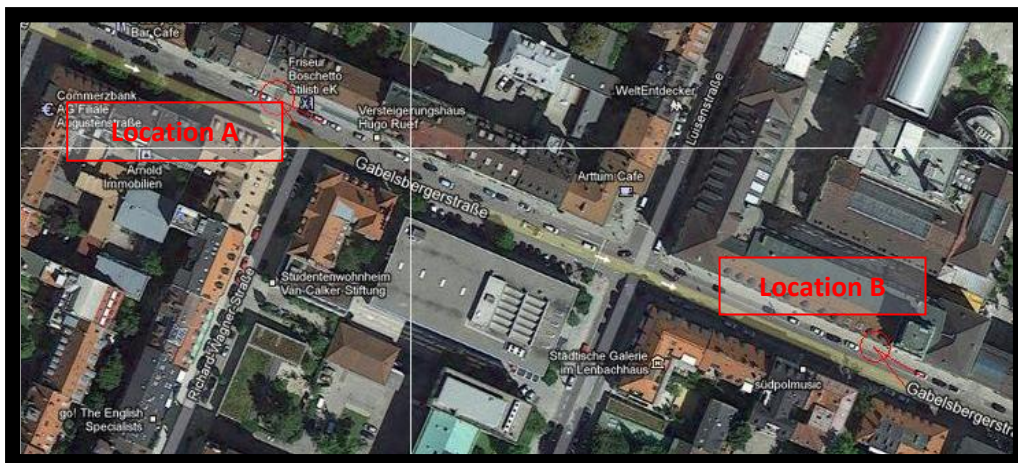


Figure 17

First set of measurements were made on 27.11.2012, two days after the implementation of the new temporary traffic signage. A total of 52 speed measurements were made at Location A and 90 speed measurements at Location B. The average speed at Location B proved that there was a mistake in the speed measurements made before implementation of project.

The effect of the signage installed for the project area was that average speed was reduced by 7 km/hr which makes it a 15% average speed decrease for the project area (**Figure 18**). However drivers are still driving over the new 30 km/hr speed limit. This could be due to the need for an adaption period for the new speed limit.

| | |
|---|------------------|
| Allowed Speed Limit | 50 km/hr |
| New Reduced Speed Limit (during peak lunch hours) | 30 km/hr |
| Avg. Speed Measured 230 Meters Before Project Crossing* | ~ 48 km/hr |
| Avg. Speed Measured At Project Crossing** | ~ 41 km/hr |
| Total Avg. Speed Reduction | ~ 7 km/hr |

Figure 18

Second set of measurements were made on 20.12.2012, three weeks after the implementation of the new temporary traffic signage. A total of 100 speed measurements were made at Location A and 100 speed measurements at Location B (**Figure 19** and **20**). The results indicate that average speed is reduced by 26 km/hr which makes a total of 47% speed reduction for the project area. Average speed measured at Location A was similar to the previous measurement (only + 1km/hr difference) indicating that the speed reduction is most likely due to the new signage installed and not likely another influence.

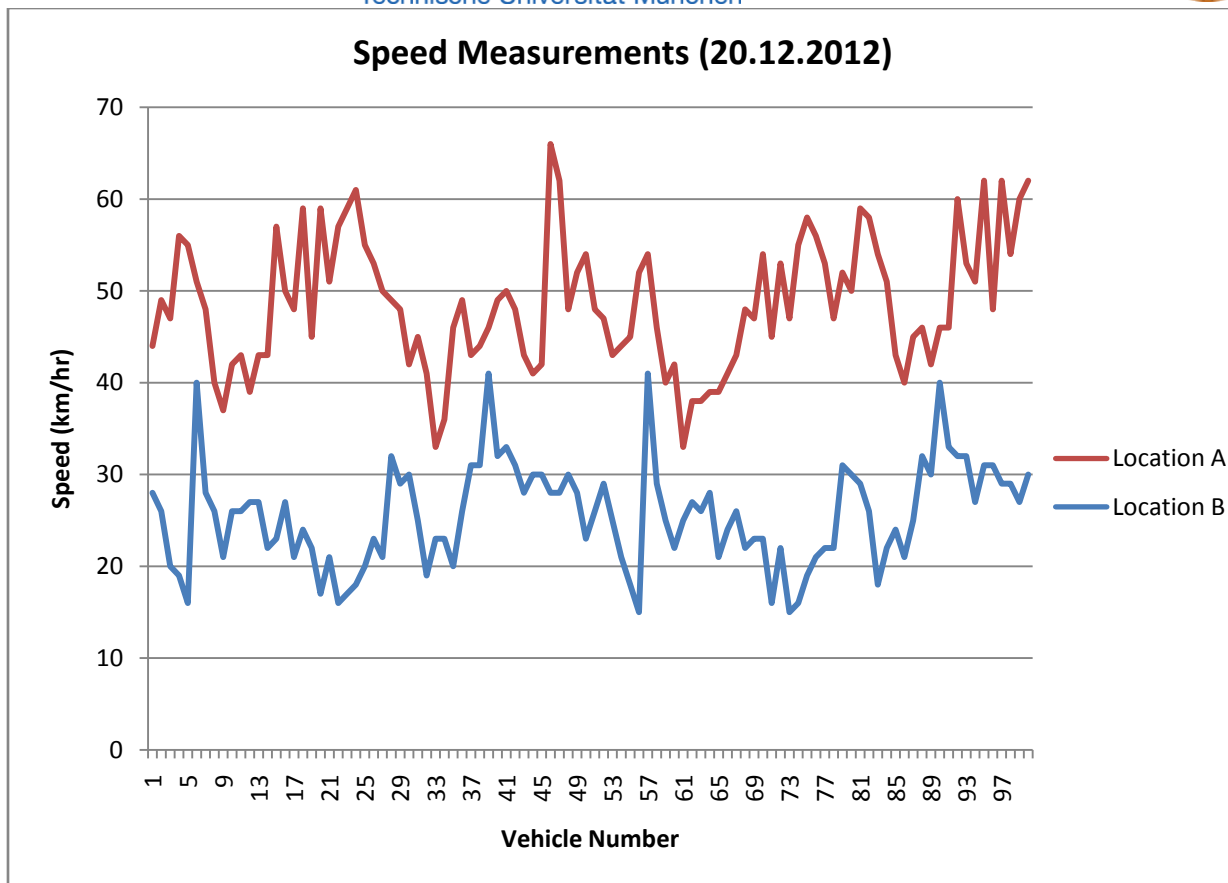


Figure 19

| | |
|---|-------------------|
| Allowed Speed Limit | 50 km/hr |
| New Reduced Speed Limit (during peak lunch hours) | 30 km/hr |
| Avg. Speed Measured 230 Meters Before Project Crossing* | ~ 49 km/hr |
| Avg. Speed Measured At Project Crossing** | ~ 26 km/hr |
| Total Avg. Speed Reduction | ~ 23 km/hr |



Figure 20

Visual observation pre-project implementation showed that cars had a priority over the pedestrians, who were able to cross the street only when the gaps between car platoons was sufficiently large. However, after the signage was installed, drivers appear to be more aware of pedestrians crossing. In fact, it was observed multiple times that when a significant number of pedestrians are crossing the street at the same time, drivers would stop and let the pedestrians pass.

Summary

Overall, participation in the STARS competition was a great experience for the TUM Student Team. It was a great introduction into the perseverance, social interaction, and quality of technical know-how required to conceive, develop, and execute a local, low-cost, and easy-to-implement speed management project.

The project area was selected based on anecdotal evidence and personal experience while crossing Gabelsbergerstraße at the unsignalized crossing between the main Campus of the Technische Universität München (TUM) and its canteen. Given that no public safety data was available, the TUM Student Team developed and distributed an online survey which confirmed the fact that students felt unsafe crossing given the high vehicular speed in the area. After much research, the Student Team modified their original ideas to reduce speed given the strict German regulations and the potential cost. Even though the refined project proposal was low-cost and easy to implement, the language barrier was a huge obstacle for moving the project forward. The TUM Student Team was relieved when they were able to enlist the aid of TUM's Chair of Traffic Engineering and Control, Univ.-Prof. Dr.-Ing. Fritz Busch, in order to obtain a contact point at the City's Department of Traffic and City Planning. After several meetings with City officials, the Student Team agreed with Mr. Robert Neuner from the City's Department of Traffic and City Planning on what the final project implementation would look like. In exchange for incurring the costs of the project implementation, the City required from the Student Team a report of the final results of implementation. In addition, the report answered the following questions:

1. Is it possible to improve traffic safety by simply installing street signs and not changing street infrastructure? **Yes, as seen by the large reduction (-47%) of the average speed greatly increases traffic safety in the area.**
2. Would temporary signage and equipment reduce speed and improve safety thus warranting a more permanent solution? **Most likely the temporary signage and equipment will become permanent given the success of the speed reduction achieved. A third set of measurements as well as a more detailed traffic flow analysis is still pending.**
3. Does the proposed solution meet the speed management goals of the STARS project? **Yes, the proposed solution and ensuing implementation met the speed management goals of the STARS project.**

In the end, the STARS project in Munich is considered a success. The new signage and temporal speed limit greatly reduced speed at the project site. By 15% two days after implementation and by 47% three weeks after implementation. Special thanks go out to Mr. Ilyas Daoud from the ETSC for his support throughout the project. Other thanks go out to the TUM's Student Union (AStA), Mr. Martin Margreiter of TUM's Traffic Engineering and Control Department, the Chair of Traffic Engineering and Control at TUM Univ.-Prof. Dr.-Ing. Fritz Busch, and Mr. Robert Neuner from the City of Munich's Department of Traffic and City Planning. Without their help this project could not have been achieved.

Appendix I: Online Survey

Thank you for taking the time to help us with this survey.

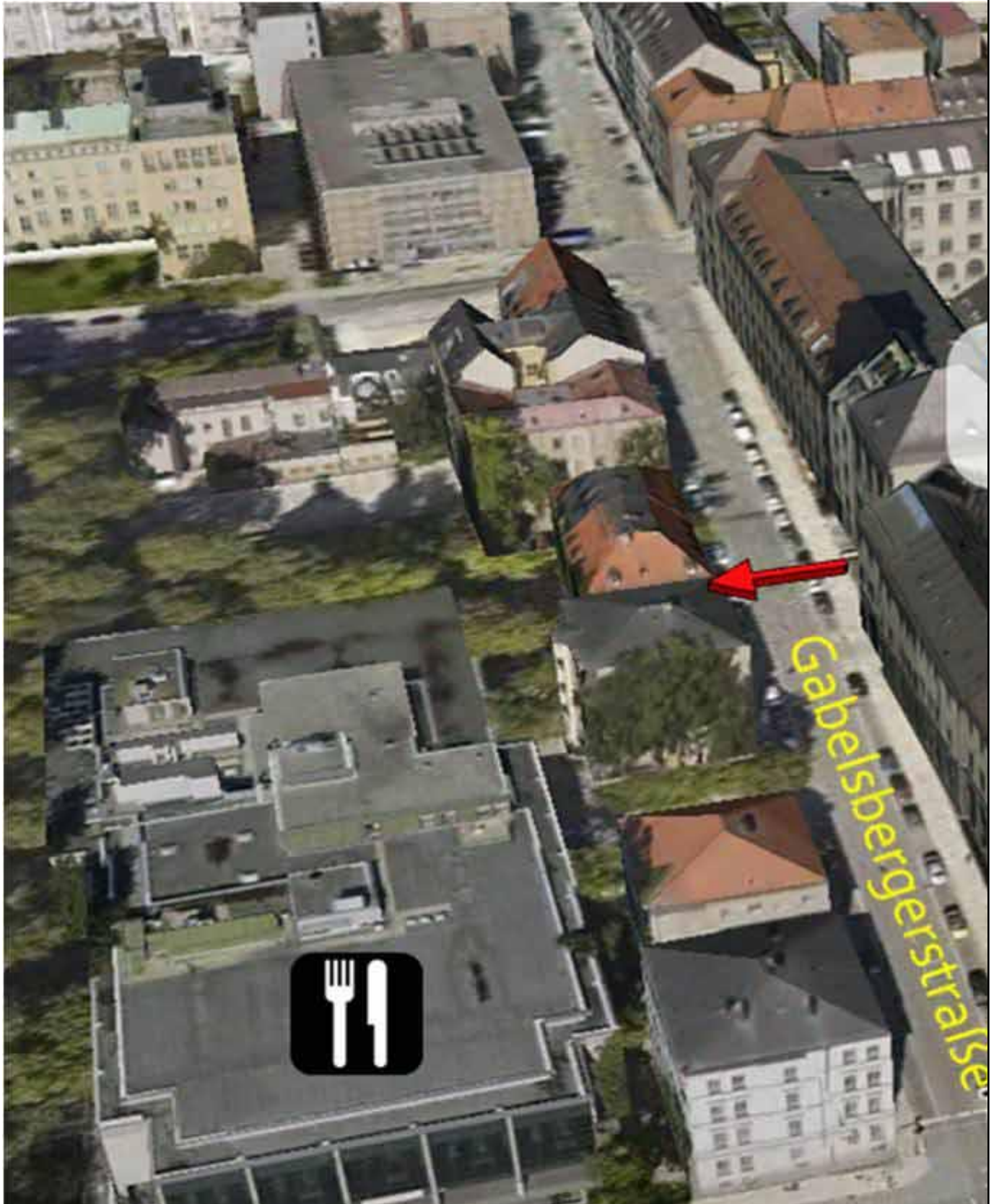
We are currently trying to determine how safe pedestrians feel while crossing Gabelsbergerstraße to go between the main TUM campus and the Mensa area in order to determine if new safety measures are necessary. This brief survey will take approximately 5 minutes. Your answer could make a difference!

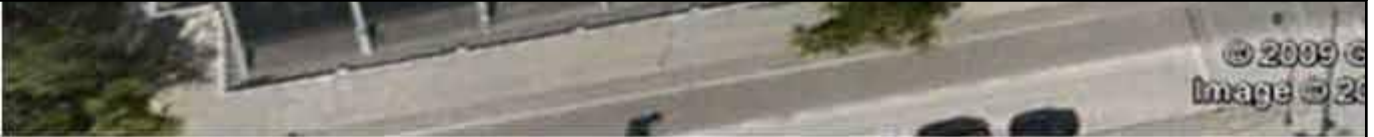
Vielen Dank für Ihre Zeit das Sie an dieser Umfrage teilnehmen.

Wir möchten feststellen wie sicher sich Fußgänger fühlen, wenn sie die Gabelsbergerstraße zwischen dem Haupt TUM Campus und der Mensa überqueren, um fest zu legen ob neue Sicherheitsmaßnahmen notwendig sind. Diese Kurzfrage dauert ungefähr 5 Minuten. Ihre Antworten können zu einer Veränderung beitragen!

The following questions are based on the Gabelsbergerstraße crossing depicted below...

(Die folgenden Fragen beziehen sich auf die Überquerung der Gabelsbergerstraße...)





from the ground...



1. On a typical semester day, how often do you cross Gabelsbergerstraße at the point shown above in order to go between the main TUM campus and the Mensa area? (An einem normalen Semestertag, wie oft übergehen sie die Gabelsbergerstraße an der oben abgebildeten Stelle um Zwischen TUM Campus und Mensa hin und her zu gehen?)

- More than two times per day (Mehr als zweimal am Tag)
- Two times per day (Zweimal am Tag)
- Once per day (Einmal am Tag)
- Never (Nie)

Other (please specify), Andere Antworten (erklären Sie welche)

**2. On a weekly basis, how many times do you cross Gabelsbergerstraße at the point shown above in order to go between the main TUM campus and the Mensa area?
(Wie oft übergehen Sie pro Woche die Gabelsbergerstraße an der oben abgebildeten Stelle um zwischen TUM Campus und Mensa hin und her zu gehen?)**

- 5 or less (oder weniger)
- 6 - 10
- 11 - 15
- 16 - 20
- 21 or more (oder mehr)

**3. At what time do you usually cross Gabelsbergerstraße at the point shown above?
Multiple answers are possible.**

(Zu welcher Zeit übergehen Sie zu der Regel die Gabelsbergerstraße a der oben abgebildeten Stelle? Mehrfachnennungen sind möglich.)

- ... - 11:00
- 11:01 - 12:00
- 12:01 - 13:00
- 13:01 - 14:30
- 14:31 - ...

4. How safe do you feel while crossing?

(Wie sicher fühlen Sie sich bei den Überquerung?)

- Very Safe (Sehr sicher)
- Safe (Sicher)
- Neutral (Neutral)
- Unsafe (Unsicher)
- Very Unsafe (Sehr unsicher)

Other (please specify), Andere (erklären Sie welche)

5. What is your relationship to TUM?

(Aus zu welcher Gruppierung gehören Sie an der TUM?)

- Student (Student)
- Alumni (Alumni)
- Faculty (Lehrkraft)
- Staff (Mitarbeiter oder Angestellter)

Other (please specify), Andere Gruppe (erklären Sie welche)

6. Which category below includes your age?

(Zu welcher Altersgruppe gehören Sie?)

- 18 or younger (oder junger)
- 19 - 25
- 26 - 30
- 31 - 35
- 36 - 40
- 41 - 45
- 46 - 50
- 51 - 55
- 56 - 60
- 60 or older (oder älter)

7. What is your gender?

(Welcher Geschlecht sind Sie?)

- Male (Männlich)
- Female (Weiblich)

8. Have you ever seen or been involved in an accident while crossing Gabelsbergerstraße at the point shown above?

(Haben Sie schon einmal einen Unfall gesehen, oder waren an einen Unfall beteiligt, der an der oben abgebildeten Stelle der der Gabelsbergerstraße, passiert ist?)

- Yes (Ja)
- No (Nein)

Other (please specify), Andere (erklären Sie welche)

9. If yes, could you provide a brief description of what happened?

(Wenn ja, können Sie den Vorfall bitte kurz schildern?)

10. Any additional comments/questions/suggestions?





(Kommentare, Fragen, Vorschläge, Anregungen?)

And its done! If you would like to contact us we can be reached at starsprojectmuenchen@gmail.com. Thank you for your time!

Fertig! Wenn Sie mit uns Kontakt aufnehmen möchten, können Sie uns unter starsprojectmuenchen@gmail.com erreichen. Vielen Dank für Ihre Zeit!






Appendix II: Online Survey Results

1. On a typical semester day, how often do you cross Gabelsbergerstraße at the point shown above in order to go between the main TUM campus and the Mensa area? (An einem normalen Semestertag, wie oft übergehen sie die Gabelsbergerstraße an der oben abgebildeten Stelle um Zwischen TUM Campus und Mensa hin und her zu gehen?)

| | | Response Percent | Response Count |
|--|---|------------------|----------------|
| More than two times per day (Mehr als zweimal am Tag) |  | 21.6% | 47 |
| Two times per day (Zweimal am Tag) |  | 57.8% | 126 |
| Once per day (Einmal am Tag) |  | 14.7% | 32 |
| Never (Nie) |  | 6.0% | 13 |
| Other (please specify), Andere Antworten (erklären Sie welche) | | | 7 |

| | |
|--------------------------|------------|
| answered question | 218 |
| skipped question | 7 |

2. On a weekly basis, how many times do you cross Gabelsbergerstraße at the point shown above in order to go between the main TUM campus and the Mensa area? (Wie oft übergehen Sie pro Woche die Gabelsbergerstraße an der oben abgebildeten Stelle um zwischen TUM Campus und Mensa hin und her zu gehen?)

| | | Response Percent | Response Count |
|--------------------------|---|------------------|----------------|
| 5 or less (oder weniger) |  | 30.0% | 67 |
| 6 - 10 |  | 42.2% | 94 |
| 11 - 15 |  | 17.0% | 38 |
| 16 - 20 |  | 8.5% | 19 |
| 21 or more (oder mehr) |  | 2.2% | 5 |
| answered question | | | 223 |
| skipped question | | | 2 |

**3. At what time do you usually cross Gabelsbergerstraße at the point shown above?
Multiple answers are possible. (Zu welcher Zeit übergehen Sie zu der Regel die
Gabelsbergerstraße a der oben abgebildeten Stelle? Mehrfachnennungen sind möglich.)**

| | | Response Percent | Response Count |
|--------------------------|--|---------------------|-------------------|
| ... - 11:00 | | 29.7% | 66 |
| 11:01 - 12:00 | | 53.2% | 118 |
| 12:01 - 13:00 | | 77.0% | 171 |
| 13:01 - 14:30 | | 31.5% | 70 |
| 14:31 - ... | | 32.4% | 72 |
| answered question | | | 222 |
| skipped question | | | 3 |

**4. How safe do you feel while crossing? (Wie sicher fühlen Sie sich bei den
Überquerung?)**

| | | Response Percent | Response Count |
|--|--|---------------------|-------------------|
| Very Safe (Sehr sicher) | | 8.5% | 19 |
| Safe (Sicher) | | 17.9% | 40 |
| Neutral (Neutral) | | 26.9% | 60 |
| Unsafe (Unsicher) | | 35.0% | 78 |
| Very Unsafe (Sehr unsicher) | | 11.7% | 26 |
| Other (please specify), Andere (erklären Sie welche) | | | 4 |
| answered question | | | 223 |
| skipped question | | | 2 |



5. What is your relationship to TUM? (Aus zu welcher Gruppierung gehören Sie an der TUM?)

| | | Response Percent | Response Count |
|---|--|------------------|----------------|
| Student (Student) | | 88.3% | 197 |
| Alumni (Alumni) | | 0.9% | 2 |
| Faculty (Lehrkraft) | | 1.3% | 3 |
| Staff (Mitarbeiter oder Angestellter) | | 9.4% | 21 |
| Other (please specify), Andere Gruppe (erklären Sie welche) | | | 1 |
| answered question | | | 223 |
| skipped question | | | 2 |



6. Which category below includes your age? (Zu welcher Altersgruppe gehören Sie?)

| | | Response Percent | Response Count |
|-----------------------------|--|------------------|----------------|
| 18 or younger (oder junger) | | 1.8% | 4 |
| 19 - 25 | | 79.5% | 178 |
| 26 - 30 | | 11.2% | 25 |
| 31 - 35 | | 5.4% | 12 |
| 36 - 40 | | 0.9% | 2 |
| 41 - 45 | | 0.0% | 0 |
| 46 - 50 | | 0.4% | 1 |
| 51 - 55 | | 0.4% | 1 |
| 56 - 60 | | 0.4% | 1 |
| 60 or older (oder älter) | | 0.0% | 0 |
| answered question | | | 224 |
| skipped question | | | 1 |

7. What is your gender? (Welcher Geschlecht sind Sie?)

| | | Response Percent | Response Count |
|-------------------|--|------------------|----------------|
| Male (Männlich) |  | 78.1% | 175 |
| Female (Weiblich) |  | 21.9% | 49 |
| answered question | | | 224 |
| skipped question | | | 1 |

8. Have you ever seen or been involved in an accident while crossing Gabelsbergerstraße at the point shown above? (Haben Sie schon einmal einen Unfall gesehen, oder waren an einen Unfall beteiligt, der an der oben abgebildeten Stelle der der Gabelsbergerstraße, passiert ist?)

| | | Response Percent | Response Count |
|--|--|------------------|----------------|
| Yes (Ja) |  | 3.2% | 7 |
| No (Nein) |  | 96.8% | 215 |
| Other (please specify), Andere (erklären Sie welche) | | | 0 |
| answered question | | | 222 |
| skipped question | | | 3 |

9. If yes, could you provide a brief description of what happened? (Wenn ja, können Sie den Vorfall bitte kurz schildern?)

| | Response Count |
|-------------------|----------------|
| | 4 |
| answered question | 4 |
| skipped question | 221 |

10. Any additional comments/questions/suggestions? (Kommentare, Fragen, Vorschläge, Anregungen?)

| | Response Count |
|--------------------------|---------------------------|
| | 25 |
| answered question | 25 |
| skipped question | 200 |

**Page 2, Q1. On a typical semester day, how often do you cross Gabelsbergerstraße at the point shown above in order to go between the main TUM campus and the Mensa area?
(An einem normalen Semestertag, wie oft übergehen sie die Gabelsbergerstraße an der oben abgebildeten Stelle um Zwischen TUM Campus und Men...**

| | | |
|---|---|----------------------|
| 1 | 3 times in a week | Jul 15, 2012 9:11 AM |
| 2 | 3x pro Woche im Schnitt | Jun 9, 2012 5:20 AM |
| 3 | Zweimal am Tag, aber nur an zwei Tagen die Woche | Jun 8, 2012 12:28 PM |
| 4 | Ab und zu | Jun 8, 2012 11:21 AM |
| 5 | ab und zu | Jun 8, 2012 10:35 AM |
| 6 | Uregelmäßig, kommt drauf an ob ich dort esse, welchen Bus ich nehmen möchte oder welche U Bahn, ob ich zwischen den Vorlesungen nach Hause gehe oder nicht. Manchmal also nie manchmal aber auch 6 mal... | Jun 8, 2012 10:09 AM |
| 7 | Die Arbeitsräume des 4. Semesters Architektur liegen im oberen Stockwerk der Mensa | Jun 8, 2012 10:03 AM |

**Page 2, Q4. How safe do you feel while crossing?
(Wie sicher fühlen Sie sich bei den Überquerung?)**

| | | |
|---|---|----------------------|
| 1 | I do never use it | Jun 12, 2012 9:53 PM |
| 2 | naja wenn man die überquerung schafft kommt die noch viel gefährlichere falle, mensa essen...das muss man erstmal überleben | Jun 9, 2012 11:46 AM |
| 3 | Natürlich ist die Stelle im Prinzip er kritisch zu betrachten.. es ist jedoch auch so, dass 75 Meter die Straße hoch an der Kreuzung Arcisstraße eine Ampelanlage steht, an der man die Straße bequem und sicher überqueren kann - und man muss noch nicht mal auf der anderen Straßenseite zurücklaufen, schließlich gibt es an der Arcisstraße auch einen Mensa-Eingang. Daher könnten die finanziellen Mittel mMn besser eingesetzt werden, als hierfür. | Jun 9, 2012 10:50 AM |
| 4 | die autos werden schon bremsen (hoffentlich!) | Jun 8, 2012 8:05 PM |

**Page 2, Q5. What is your relationship to TUM?
(Aus zu welcher Gruppierung gehören Sie an der TUM?)**

| | | |
|---|--------|---------------------|
| 1 | Intern | Jun 8, 2012 9:54 AM |
|---|--------|---------------------|

**Page 3, Q9. If yes, could you provide a brief description of what happened?
(Wenn ja, können Sie den Vorfall bitte kurz schildern?)**

| | | |
|---|---|----------------------|
| 1 | Car accident at the cross (near the traffic lights) | Jun 8, 2012 10:58 AM |
| 2 | one car braked to fast another one ran in it from behind | Jun 8, 2012 10:10 AM |
| 3 | Fahrradfahrerin wurde angefahren | Jun 8, 2012 10:01 AM |
| 4 | Ich hab mal mit dem Fahrrad einen Fußgänger angefahren, der plötzlich zwischen geparkten Autos auf die Straße gelaufen ist. | Jun 8, 2012 9:58 AM |

**Page 3, Q10. Any additional comments/questions/suggestions?
(Kommentare, Fragen, Vorschläge, Anregungen?)**

| | | |
|----|---|-----------------------|
| 1 | I have seen several dangerous scenes on the street, but thanks God not a real collision. | Jul 18, 2012 11:16 AM |
| 2 | Studying in Garching, thus not really involved | Jun 12, 2012 9:54 PM |
| 3 | Die gleiche Situation ist an der Theresienstraße, Studentenmassen die eine zweispurige Straße mehrmals täglich überqueren. Es wundert mich immer wieder noch keinen Unfall an einer der beiden Straßen erlebt zu haben. | Jun 9, 2012 12:34 PM |
| 4 | Mensa abreißen und in der alten Fabrikhalle / Heizkraftwerk direkt im Innenhof neu einrichten (wunderschönes Gebäude von Innern und bestimmt auch genug Platz für eine Mensa). | Jun 9, 2012 11:47 AM |
| 5 | siehe Kommentar auf der vorherigen Seite | Jun 9, 2012 10:51 AM |
| 6 | sind ja genug Bauingenieure da die wieder eine schöne Brücke bauen könnten. wenn man dann gleich im ersten Stock in der Mensa anstehn könnte, wärs natürlich perfekt. | Jun 8, 2012 8:57 PM |
| 7 | tunnel mit laufband wär cool, studenten mögen nämlich keine bewegung und kein tageslicht | Jun 8, 2012 8:06 PM |
| 8 | Das ist eine wichtige Umfrage, das ist wirklich eine gefährliche Stelle. Man unterschätzt sehr leicht, wie schnell die Autos auf der Straße unterwegs sind. Bin schon mehrmals fast vor ein Auto gelaufen, weil ich etwas unachtsam war. | Jun 8, 2012 1:57 PM |
| 9 | Autofahrer bremsen nie falls man auf der Straße ist, manche geben sogar noch Gas!!!! Und sie hupen, als würde die Straße nur Autofahrern gehören (Speziell als Radfahrer benachteiligt) | Jun 8, 2012 1:42 PM |
| 10 | In general, crossing the street is not a real problem hence it is a one-way street and the traffic lights at Luisenstraße interrupt the car stream. But the average car speed is pretty high, so that one has to be quite careful while crossing the street. Maybe it would be not that risky if there was more speed monitoring on Gabelsbergerstraße. | Jun 8, 2012 1:17 PM |
| 11 | Autos fahren oft schneller als 50 km/h (BWM und typische verdächtige) und nehmen oft keine Rücksicht auf Fußgänger die über die Straße eilen. | Jun 8, 2012 12:50 PM |
| 12 | Ich würde mir entweder eine Fußgängerampel wünschen oder eine oberirdische Überquerung, so wie sie zwischen dem Nordgebäude über die Theresienstraße zu den Gebäuden südlich der Theresienstraße existiert. | Jun 8, 2012 12:37 PM |
| 13 | Es gibt meiner Meinung nach hier keinen Änderungsbedarf. | Jun 8, 2012 12:18 PM |
| 14 | Autos könnten langsamer fahren um das Sicherheitsgefühl zu erhöhen | Jun 8, 2012 11:45 AM |
| 15 | Zebrastrreifen? | Jun 8, 2012 11:35 AM |
| 16 | keine Ampel, da laufen trotzdem alle drüber. Ein Zebrastrreifen!!! | Jun 8, 2012 11:32 AM |
| 17 | An dieser Stelle wäre eine Unterführung angebracht! | Jun 8, 2012 11:13 AM |
| 18 | zebra crossing | Jun 8, 2012 10:45 AM |
| 19 | Durch die Einbahnstrasse hat man eigentlich das Gefühl, dass man den | Jun 8, 2012 10:26 AM |

**Page 3, Q10. Any additional comments/questions/suggestions?
(Kommentare, Fragen, Vorschläge, Anregungen?)**

| | | |
|----|--|---------------------|
| | Verkehr recht gut abschätzen kann! | |
| 20 | Most senseless and stupid survey ever! xD | Jun 8, 2012 9:58 AM |
| 21 | Ein elektrischer Rollstuhl hätte mich einmal beinahe auf dem Gehsteig erfasst, der ist gerast wie ein irrer! Auf der Strasse hatte ich noch keine Probleme... | Jun 8, 2012 9:58 AM |
| 22 | Please do spend lots of money to build a fancy bridge there! It should include an elevator with a capacity of 10 000 students per minute and include a free bar! | Jun 8, 2012 9:53 AM |
| 23 | Ein Zebrastreifen sollte an dieser Stelle vorgesehen werden! | Jun 8, 2012 9:41 AM |
| 24 | Da diese Straße eine Einbahnstraße ist, ist es nicht so extrem wie man erwarten würde. Man muss halt einfach warten, bis die Autos vorbei sind. | Jun 8, 2012 9:35 AM |
| 25 | Bitte, bitte keine Ampel oder ähnliches. Das würde nur zu Unfällen führen, weil die Autofahrer dann weniger Rücksicht nehmen würden. | Jun 6, 2012 4:42 PM |