APPENDIX D: FROM ISSUES TO METHODS

Category	Issues	Concrete Questions	Tasks, Other Materials	Evidence/Data to Collect	How to Collect Data
Hardware, buttons and task flows	**Hardware layout and design may not support task flow. We suspect this may be different for the two designs.**	Do drivers insert card without errors? What happens when the try? [insert card after pushing buttons, or multiple times]	Task: Pay for parking using CC/DC for a desired amount of time; Material: Clipboard, pen, Data collection sheet	task success/failure; error types and counts; notes on what happens when they try	Unobtrusive observation with data collection sheet
	Hardware layout and design may not support task flow. We suspect this may be different for the two designs.	Can the driver select a desired time without errors? [What happens when they try?]	Task: Pay for parking using CC/DC for a desired amount of time; Material: interview script + questions	task success/failure; error types and counts; notes on what happens when they try	Unobtrusive observation with data collection sheet
	Hardware layout and design may not support task flow. We suspect this may be different for the two designs.	Do users experience errors? And if so what error?	Task: Pay for parking using CC/DC for a desired amount of time; Material: Clipboard, pen, Data collection sheet	Error types for each step; Counts for each type of error	Unobtrusive observation with data collection sheet
	Hardware layout and design may not support task flow. We suspect this may be different for the two designs.	Do pay station users process payment and print ticket without errors? [hit the print button at the correct step] What happens when they try?	Task: Pay for parking using CC/DC for a desired amount of time; Material: Clipboard, pen, Data collection sheet	task success/failure; error types and counts; notes on what happens when they try	Unobtrusive observation with data collection sheet
	Hardware layout and design may not support task flow. We suspect this may be different for the two designs.	Do users successfully pickup ticket after processing payment? [What are users next actions after payment]	Task: Pay for parking using CC/DC for a desired amount of time; Material: Clipboard, pen, Data collection sheet	task success/failure; notes on next action	Unobtrusive observation with data collection sheet
		Does the parking pay	Task: Pay for parking using		

	The pay station display screen and ticket may not effectively inform the user the total cost of their purchase.	Does the parking pay station user know how much they paid for parking?	Task: Pay for parking using CC/DC for a desired amount of time; Material: interview script + questions	interview question/answer	Note taking
Overall Experience	**We suspect that the aggregate of pay station and sticker issues may leave users dissatisfied with their experience using the parking pay station . We suspect this may be different for the two designs.**	How do parking pay station users feel about how long it took them to pay for parking? (subjective perception of time)	Task: Pay for parking using CC/DC for a desired amount of time; Material: interview script + questions	interview question/answer; Rate how long you feel it took you to purchase parking pass; use likert scale rating from 1 (not long at all) to 7 (very long time)	Note taking
	We suspect that drivers may be dissatisfied with their parking pay station experience. We suspect this may be different for the two designs.	How do parking pay station users rate their experience using the parking pay station and parking pass?	Task: Pay for parking using CC/DC for a desired amount of time; Material: interview script + questions	interview question/answer; How satisfied are you with your experience; use likert scale rating from 1 (not satisfied) to 7 (very satisfied)	Note taking
	We suspect that drivers may not feel confident they will avoid citation. We suspect this may be different for the two designs.	Are drivers confident that they have completed the steps necessary to avoid citation?	Task: Pay for parking using CC/DC for a desired amount of time; Material: interview script + questions	interview question/answer; self-reported confidence level on Likert 1-7 scale	Note taking

	We suspect that the parking pay station system and parking ticket may not encourage error free task completion. We suspect this may be different for the two designs.	How many drivers complete the task without experiencing errors?	Task: Pay for parking using CC/DC for a desired amount of time; Material: Clipboard, pen, Data collection sheet	Total error count on observation sheet	Unobtrusive observation with data collection sheet
	We suspect that the parking pay station system may be easier to use with more frequent use.	Do parking pay station users with more experience complete the task with fewer errors?	Task: Pay for parking using CC/DC for a desired amount of time; Material: Clipboard, pen, Data collection sheet, interview script + questions	task success rates + interview question/answer on frequency of use	Unobtrusive observation with data collection sheet + note taking
Parking Ticket Design	**We suspect the parking ticket may not effectively communicate where to place the ticket on their vehicle.**	Does the driver successfully place the sticker according to instructions?	Task: Place parking ticket on car to avoid citation; Material: Clipboard, pen, Data collection sheet	Y/N	Unobtrusive observation with data collection sheet
	We suspect the parking ticket placement may not be intuitive without reading the instructions.	Do drivers refer to the instructions on the pay station sticker?	Task: Place parking ticket on car to avoid citation; Material: Clipboard, pen, interview script + questions	Y/N interview question	Note taking
	We suspect the parking pay station instructions may be required to properly use the ticket. We suspect this may differ for the two designs.	Do parking ticket instructions aid users in successfully placing the parking ticket?	Task: Place parking ticket on car to avoid citation; Material: Clipboard, pen, Data collection sheet, interview script + questions	task success rates + interview question/answer on use of ticket instructions;	Unobtrusive observation with data collection sheet + note taking

Error Correction	**We suspect the parking pay station may not clearly allow users to recover from errors without canceling the transaction.**	Do parking pay station users use the cancel button? If so why?	Task: Pay for parking using CC/DC for a desired amount of time; Material: Clipboard, pen, Data collection sheet, interview script + questions	data collection of use of the cancel button (Y/N) + interview question/answer on why the cancel button was used;	Unobtrusive observation with data collection sheet + note taking
	We suspect the parking pay station may not clearly allow users to recover from errors without canceling the transaction.	When drivers use the cancel button do they ultimately able to purchase parking pass?	Task: Pay for parking using CC/DC for a desired amount of time; Material: Clipboard, pen, Data collection sheet	Data collection on use of cancel button and overall success/failure	Unobtrusive observation with data collection sheet
	We suspect the parking pay station may not allow users to recover from errors without canceling the transaction.	How many parking pay station users abandoned the task without successfully acquiring a parking ticket?	Task: Pay for parking using CC/DC for a desired amount of time; Material: Clipboard, pen, Data collection sheet	Data collection on users who abandoned task	Unobtrusive observation with data collection sheet
Instructions/Walk up and use usability	**We suspect the parking pay station may require reading instructions for effective use.**	Do drivers refer to the instructions on the machine? If so why?	Task: Pay for parking using CC/DC for a desired amount of time; Material: interview script + questions	interview question/answer; Y/N; follow up if Y	Note taking
	We suspect the parking pay station instructions may not be helpful in purchasing the ticket. We suspect this may differ for the two designs.	When parking pay station users refer the pay station instructions do they find them helpful in completing the task?	Task: Pay for parking using CC/DC for a desired amount of time; Material: interview script + questions	interview question/answer; Likert scale 1-7 from not at all helpful to very helpful	Note taking

We suspect the parking pay station instructions may not be helpful in purchasing the ticket. We suspect this may differ for the two designs.	Do parking pay station instructions aid users in successfully completing the task of paying for parking with CC/DC for the desired amount of time?	Task: Pay for parking using CC/DC for a desired amount of time; Material: Clipboard, pen, Data collection sheet, interview script + questions	task success rates + interview question/answer on use of instructions;	Unobtrusive observation with data collection sheet + note taking
We suspect people have different concerns that impact their parking pay station use	What concerns do people have when using a parking pay station?	Task: Pay for parking using CC/DC for a desired amount of time; Material: interview script + questions	interview question/answer;	Note taking