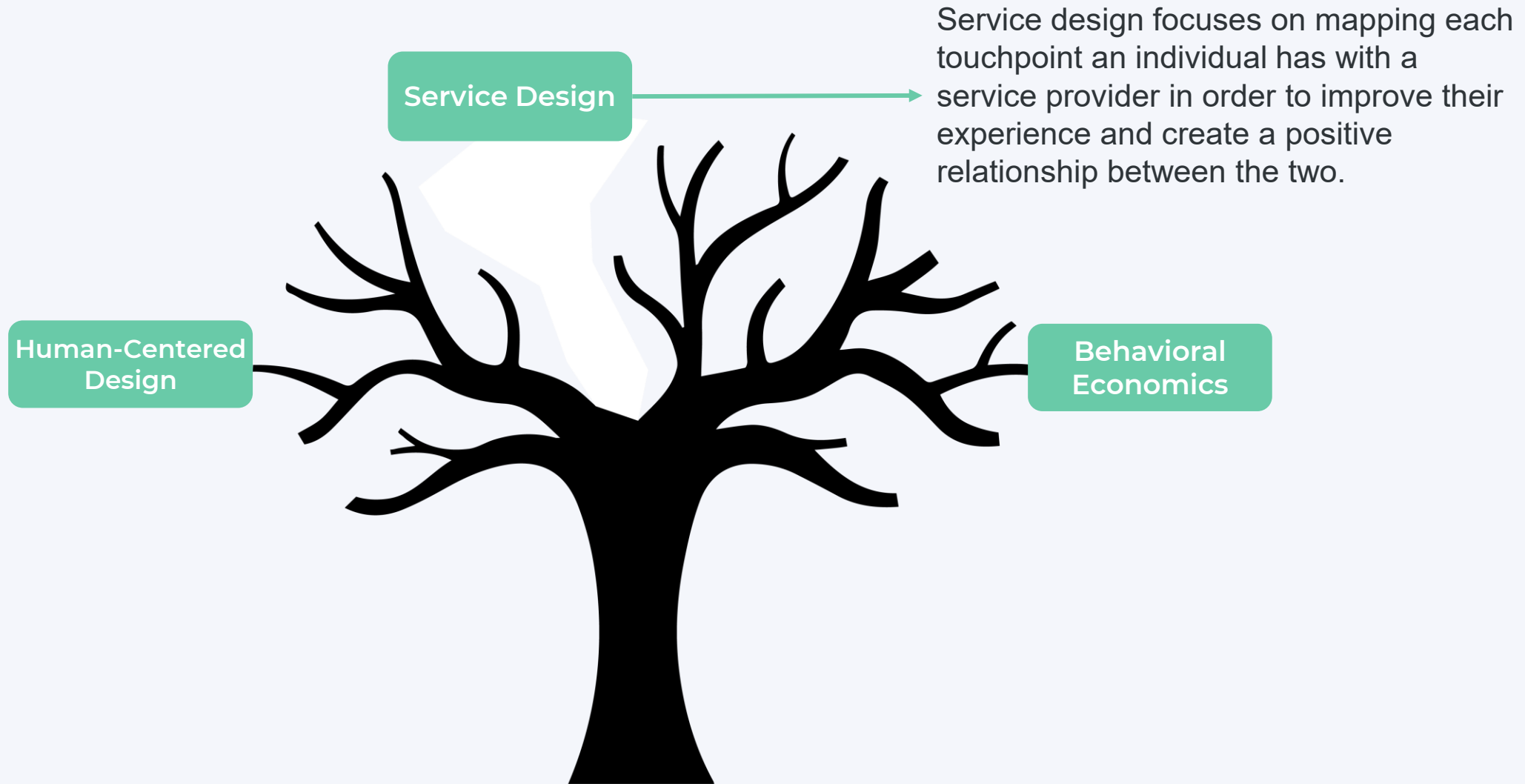


The background of the slide features a close-up of hands writing on various colored sticky notes (yellow, pink, blue) with a black marker. The entire image is overlaid with a semi-transparent red filter. A white rectangular border frames the central text area.

The Psychology of Design

Nadine Dechausay | January 21, 2021

A Design Tree



Agenda



**Definition of
Human-Centered
Design
(aka Design
Thinking)**



**Introduction to
Behavioral Economics
(aka Behavioral
Science, Behavioral
Diagnosis and Design)**



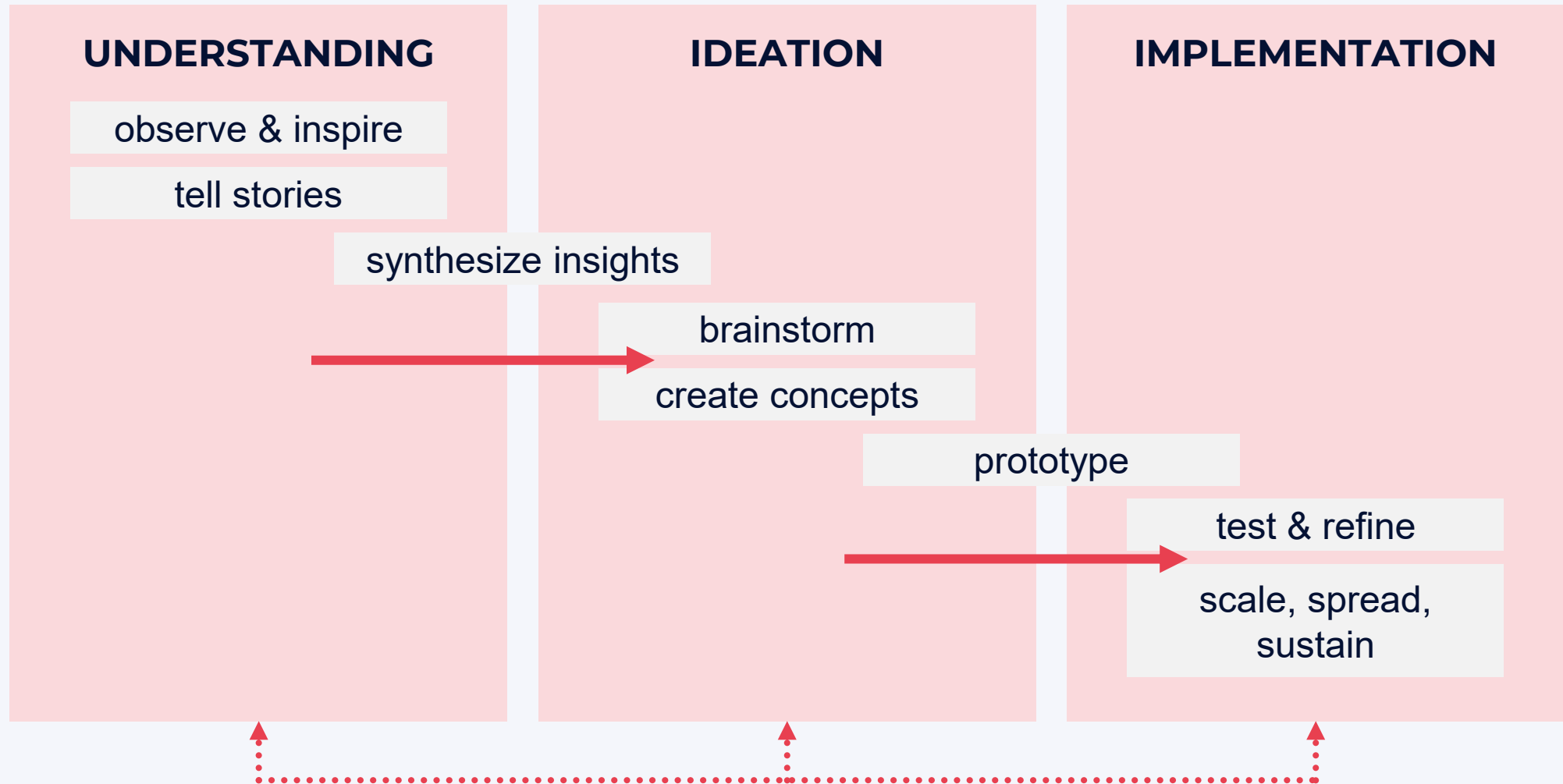
**Comparison of HCD
and BE**

“[Human-centered design is] a process that starts with people you’re designing for and ends with new solutions that are purpose-built to suit their needs. Human-centered design is about cultivating deep empathy with the people you’re designing for; generating ideas; building a bunch of prototypes; sharing what you’ve made with people you’re designing for; and eventually, putting your innovative solution out into the world.”

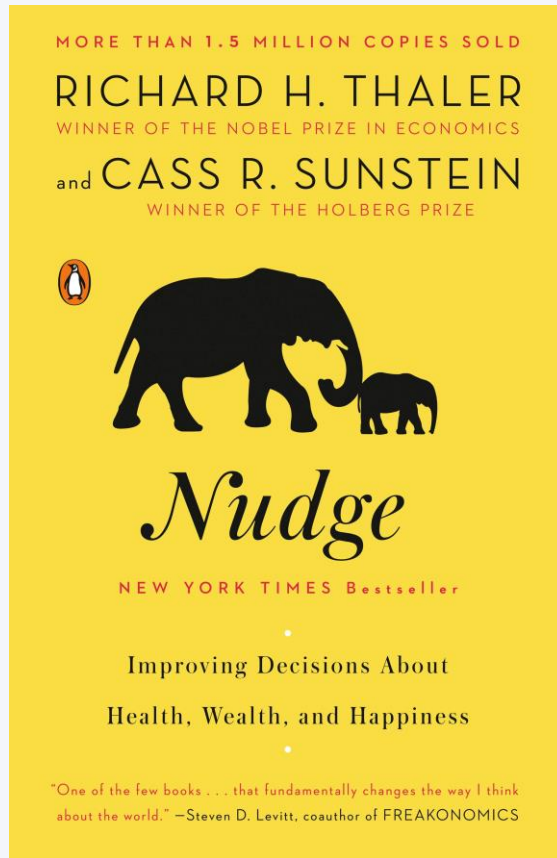
Tim Brown, IDEO chair



Human-Centered Design Process



Behavioral Economics



Cass Sunstein



Richard Thaler



Daniel Kahneman



Amos Tversky

1st Insight from Behavioral Economics



Design is everywhere, and it is never neutral



2018-2019 Iowa Application for Free & Reduced Price School Meals/Milk **Return completed form to:** Skam Lake CSD Administration Building, 419 Lake Avenue, Skam Lake, IA 50566

Complete one application per household. This application cannot be approved unless complete eligibility information is submitted.

STEP 1 List ALL Household Members who are infants, children, and students up to and including grade 12. If more spaces are required for additional names, complete the page 2.

Child's First Name	Child's Last Name	Date of Birth	Gender	Child's School	Grade	Free	Reduced
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>
						<input type="checkbox"/>	<input type="checkbox"/>

STEP 2 Do any Household Members (including you) currently participate in one or more of the following assistance programs: Food Assistance, FIP, or FIPRE? Check one: ☐ Yes ☐ No. If Yes, go to STEP 3. If you answered Yes, type a 10-digit case number here then go to STEP 4. Do not complete STEP 3.

Write your case number in this space. Medicaid, TANF & SSI case numbers are not acceptable. Case Number If you wish to apply on-line, go to print.iowa.gov or iowa.gov.

STEP 3 Report Income for ALL Household Members (Skip this step if you answered 'Yes' to STEP 2.)

Are you unsure what income to include? Please read these instructions for Free and Reduced Price School Meals/Milk. The amount of income reported will help you and the school determine if you qualify for Free or Reduced Price School Meals/Milk. The amount of income reported will help you and the school determine if you qualify for Free or Reduced Price School Meals/Milk.

A. Child Income Sometimes children in the household earn or receive income. Please include the TOTAL gross income earned by all household members listed in STEP 1 here. **Total (Gross Income)** **Net (Net Income)**

B. All Adult Household Members (including yourself) List all household members not listed in STEP 1 (including yourself) even if they do not receive income. For each household member listed, if they do receive income, report that gross income below for each source in which dollars (no cents) only. If they do not receive income from any source, write '0'. If you enter '0' in these any fields, you are certifying (guaranteeing) that there is no income to report. Applications with blank income fields will be processed as complete. Where spaces are required for additional names, attach the supplemental worksheet.

Name of Adult Household Member (First and Last)	Spouse	Parent	Other Adult	Public Assistance (All Types)	Unemployment	Other Income	Net Income
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

F. Total Household Members (Children and Adults) **G. Last Four Digits of Social Security Number (SSN) of Primary Wage Earner or Other Adult Household Member** **Check if no SSN** ☐

STEP 4 Contact Information and Adult Signature

I am certifying that all information on this application is true and that all income is reported. I understand that this information is given in connection with the receipt of Federal funds, and that school officials may verify (check) the information. I am aware that if I purposely give false information, my children may lose meal benefits, and I may be prosecuted under applicable State and Federal laws.

Street Address (if available) Apt # City State Zip Employee Phone (optional) Email (optional)

Printed name of adult completing the form (Adult Household member) Signature of adult completing the form: First completed form and sign Today's date

DO NOT WRITE BELOW THIS LINE. FOR ADMINISTRATIVE USE ONLY.

Annual income comparison: Weekly x 52, Bi-weekly x 26, 3 Times per Month x 36, Monthly x 12

Household Income: \$ ☐ Weekly ☐ Bi-weekly ☐ Twice Monthly ☐ Monthly ☐ Annually Household Size:

Application Approval: ☐ Income ☐ Other Child ☐ Free PIPRE Assistance ☐ Head Start documentation required: ☐ Homeless/Higrant/Runaway Local Official Documentation Required

Eligibility Determination: ☐ Free ☐ Reduced ☐ Free MHA Application Denied: ☐ Incomplete ☐ Over income limits

Determining Official Effective Date Confirming Official Date Following Signature Date

2nd Insight from Behavioral Economics



The users of the products and services we're designing are predictably irrational



Bounded Rationality



Bounded Self-Control



Bounded Self-Interest

3rd Insight from Behavioral Economics



We should design to help people to achieve the best outcome for them



2 Behavioral Science Examples

ideas⁴²



**Behavioral
Interventions to
Advance
Self-Sufficiency**



Why don't people show up for court when they receive a criminal summons?

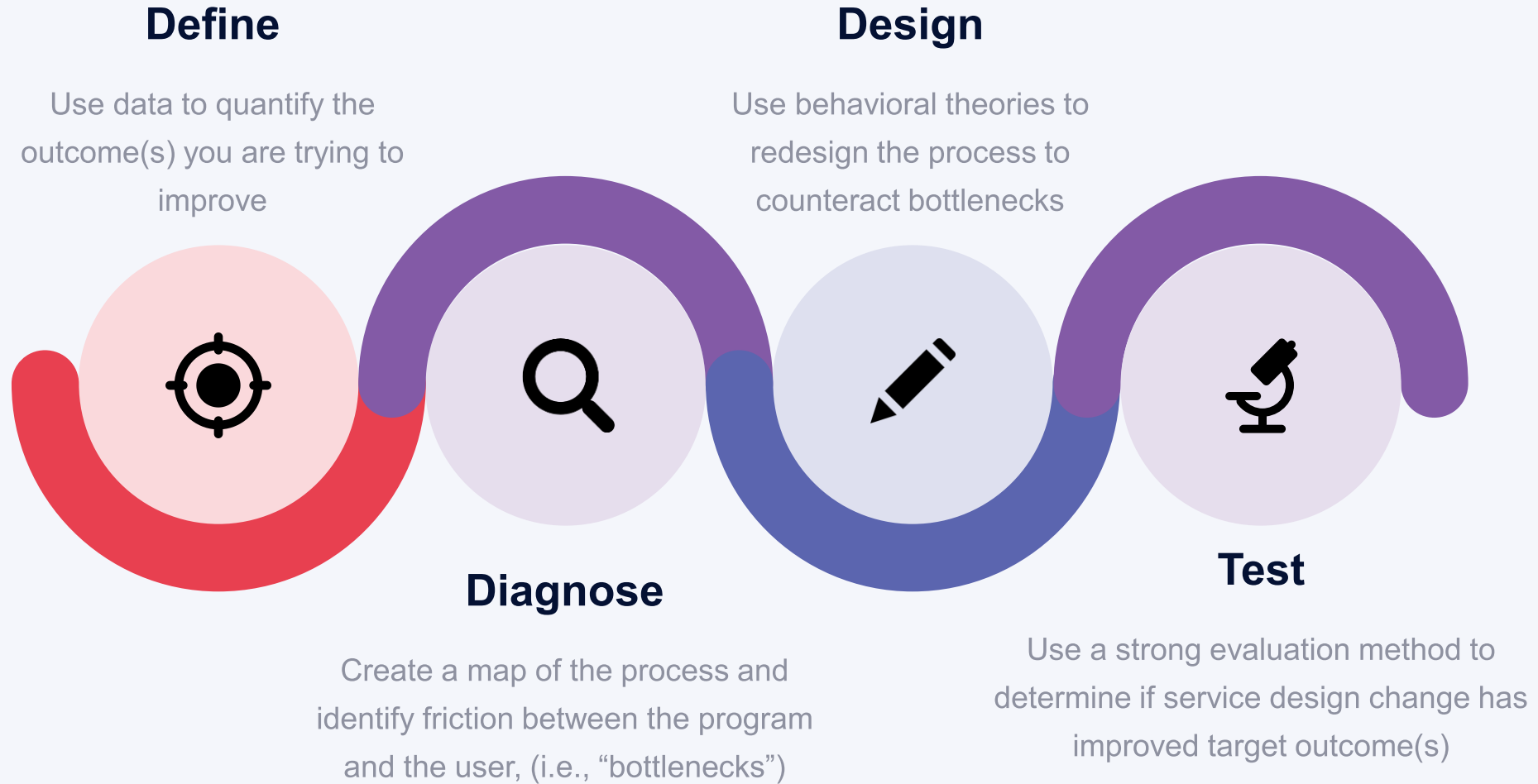
Standard Assumption

- People who do not show up are actively defying the legal system and therefore the only logical response to failure to appear is ratcheting up the punishment

Behavioral View

- Cause related to program design
- How strong is the fit between the demands of this process or the messages that are being communicated, and the cognitive and behavioral needs of the users?

Behavioral Diagnosis & Design



Quick Facts

- Location

New York City
- Population

Defendants cited for low-level criminal offenses
- Targeted Behavioral Change

Increase show rate in court

CRC-3206 (5/12)

Complaint/Information

The People of the State of New York vs.

Name (Last, First, MI)									
Street Address								Apt. No.	
City						State		Zip Code	
ID/License Number				State	Type/Class	Expires (mm/dd/yy)		Sex	
Date of Birth (mm/dd/yy)		Ht	Wt	Eyes	Hair	Plate/Reg			
Reg State	Expires (mm/dd/yy)		Plate Type	Veh Type	Make		Year	Color	
The Person Described Above is Charged as Follows:									
Time 24 Hour (hh:mm)			Date of Offense (mm/dd/yy)				County		
Place of Occurrence						NYC Park Copy	Precinct		
In Violation of Section	Subsection	VTL	Admin Code	Penal Law	Park Rules	Other			
Title of Offense:									
Bronx Criminal Court - 215 E 161 st Street, Bronx, NY 10451									
Kings Criminal Court - 346 Broadway, New York, NY 10013									
Redhook Community Justice Center - 88-94 Visitation Place, Brooklyn, NY 11231									
New York Criminal Court - 346 Broadway, New York, NY 10013									
Midtown Community Court - 314 W 54 th Street, New York, NY 10019									
Queens Criminal Court - 120-55 Queens Boulevard, Kew Gardens, NY 11415									
Richmond Criminal Court - 67 Targee Street, Staten Island, NY 10304									
Defendant stated in my presence (in substance):									
I personally observed the commission of the offense charged herein. False statements made herein are punishable as a Class A Misdemeanor pursuant to section 210.45 of the Penal Law. Affirmed under penalty of law.									
Complainant's Full Name Printed					Rank/Full Signature of Complainant			Date Affirmed (mm/dd/yy)	
Agency		Tax Registry #					Command Code		
The person described above is summoned to appear at NYC Criminal Court located at:							Summons Part	County	
Date of Appearance (mm/dd/yy)							At 9:30 a.m.		

DEFENDANT'S COPY

Intervention #1 Description

INTERVENTION #1

REDESIGN CITY'S SUMMONS FORM

Label as court appearance ticket

Move court date and time near top

Clearly indicate court location

Highlight consequences of missing court

BEFORE

CRC-3206 (3/12)

Complaint/Information

The People of the State of New York vs.

Name (Last, First, MI)

Street Address Apt. No.

City State Zip Code

Household Phone Number (mm/dd/yyyy) Sex

AFTER

CRC-3206 (1/16)

Criminal Court Appearance Ticket

Name (Last, First, MI) Date of Birth (mm/dd/yyyy)

Cell Phone Number (where court may contact you) Home Phone Number (where court may contact you)

Show up to court on:

Court Appearance Date (mm/dd/yyyy): at: 9:30 a.m.

Your court appearance location: ☐ Other (specify)

☐ Bronx Criminal Court ☐ Kings & New York Criminal Court ☐ Midtown Community Court ☐ Redhook Community Justice Center

****To avoid a warrant for your arrest, you must appear at court. At court, you may plead guilty.**

Please see back for exceptions for Public Consumption of Alcohol

Court Locations: You must appear at the court location listed below.

Bronx Criminal Court 1 Centre Street, Bronx, NY 10451

Kings & New York Criminal Court 1 Centre Street, Bronx, NY 10451

Redhook Community Justice Center 88-94 Vilella Avenue, Queens, NY 11378

Midtown Community Court 314 W 54th Street, New York, NY 10019

Queens Criminal Court 120-55 Queens Boulevard, Queens, NY 11367

Richmond Criminal Court 26 Central Avenue, Staten Island, NY 10310

23,000 Warrants avoided

Intervention #2 Description

INTERVENTION #2

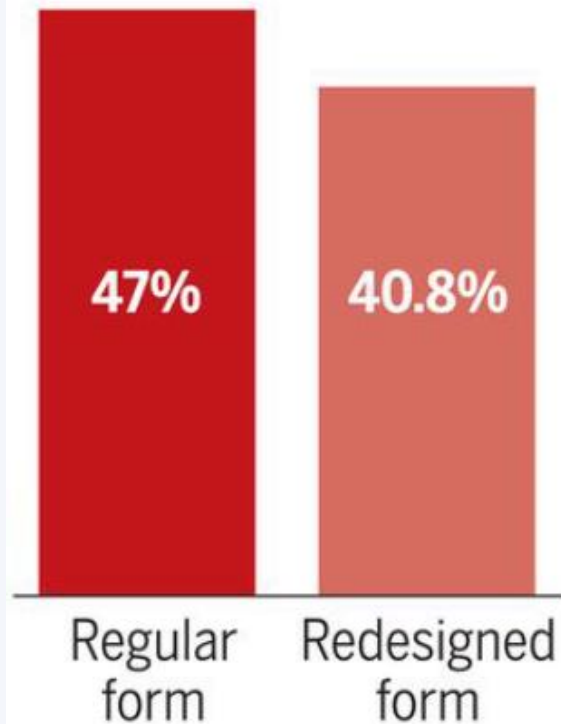
SEND TEXT REMINDERS IN ADVANCE
OF DEFENDANT'S COURT DATE



Intervention Results

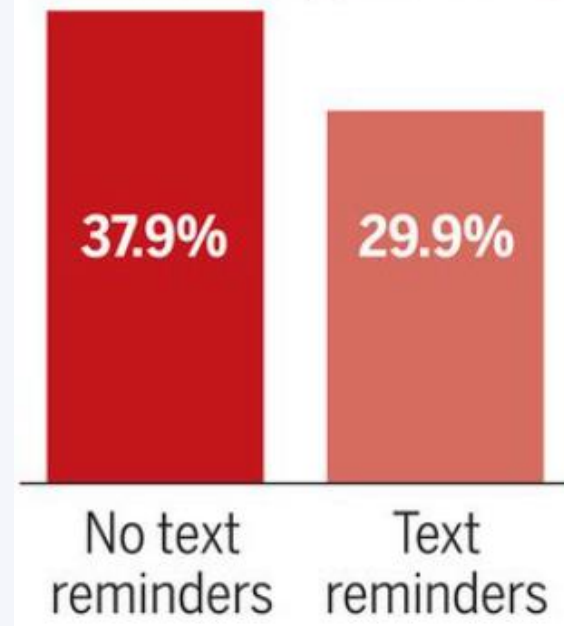
Intervention #1

Failure-to-appear rates



Intervention #2

Failure-to-appear rates



How might BE solutions differ from that of HCD?

Date/time at top

Loss aversion

GLUE LINE

CRC-3206 (1/16)

Criminal Court Appearance Ticket

Name (Last, First, MI)		Date of Birth (mm/dd/yy)
Cell Phone Number (where court may contact you)	Home Phone Number (where court may contact you)	

Show up to court on:
Court Appearance Date (mm/dd/yy): _____ at: 9:30 a.m.

Your court appearance location: ☐ Other (specify) _____

☐ Bronx ☐ Kings & New York ☐ Midtown ☐ Redhook ☐ Queens ☐ Richmond

****To avoid a warrant for your arrest, you must show up to court.****
At court, you may plead guilty or not guilty.
Please see back for exceptions for Public Consumption of Alcohol and Public Urination offenses.

Court Locations: You must appear at the court location identified above.

Bronx Criminal Court 215 E 161st Street, Bronx, NY 10451
Kings & New York Criminal Court 1 Centre Street, 16th Floor, New York, NY 10007
Redhook Community Justice Center 88-94 Visitation Place, Brooklyn, NY 11231
Midtown Community Court 314 W 54th Street, New York, NY 10019
Queens Criminal Court 120-55 Queens Boulevard, Kew Gardens, NY 11415
Richmond Criminal Court 26 Central Ave, Staten Island, NY 10301

You are Charged as Follows.

Title of Offense:

Time 24 Hour (hh:mm)	Date of Offense (mm/dd/yy)	County
----------------------	----------------------------	--------

Place of Occurrence _____ Precinct _____

In Violation of Section	Subsection	VTL <input type="checkbox"/>	Admin Code <input type="checkbox"/>	Penal Law <input type="checkbox"/>	Park Rules <input type="checkbox"/>	Other <input type="checkbox"/>
-------------------------	------------	------------------------------	-------------------------------------	------------------------------------	-------------------------------------	--------------------------------

For Additional Information and Questions:

Visit the website or call the number below for additional information about your court appearance and translation of this document.

www.mysummons.nyc
OR
Call 646-760-3010

Defendant stated in my presence (in substance): _____

I personally observed the commission of the offense charged herein. False statements made herein are punishable as a Class A Misdemeanor pursuant to section 210.45 of the Penal Law. Affirmed under penalty of law.

Complainant's Full Name Printed	Rank/Full Signature of Complainant	Date Affirmed (mm/dd/yy)
---------------------------------	------------------------------------	--------------------------

Tax Registry #	Agency	Command Code
----------------	--------	--------------

DEFENDANT'S COPY

Why don't people pay their child support orders on time?

Standard Assumption

- People who don't pay their court ordered child support are simply showing contempt for the process or don't have the means

Behavioral View

- The system isn't providing enough information and support to adopt new, difficult habit

Quick Facts

Location

- Denver, Garfield, Arapahoe, and El Paso counties in Colorado

Population

- Noncustodial parents with newly established child support orders

Targeted Behavioral Change

- Increase on-time, and full payment

Original Child Support Payment Process

Custodial parent petitions for child support with Colorado Division of Child Support Services



Paternity confirmed



Order established through administrative conference or court



Noncustodial parent receives legal documents indicating amount of obligation



Later, NCP receives letter from CDCSS with a copy of order and payment information



First payment due 30-45 days later



NCPs with regular employment required to pay by income withholding begin seeing deductions 60 days later

Intervention design

- Built a user-centered process that honors the parent-child relationship, integrates a new routine of making child support payments into the payor's life, and ensures that parents are aware of the risks associated in missing or underpaying
- Added a planning meeting immediately after the order was established and incorporated best practices from science of goal setting



Elements of the Redesign: “Stay in the Green Zone” Infographic

STAY IN THE GREEN ZONE BY PAYING CHILD SUPPORT REGULARLY AND IN FULL

EXAMPLE: JOHN HAS \$100 MONTHLY ORDER



Unless John can pay immediately, he needs to call his case worker

RED ZONE Paying less than the full monthly payment due may lead to



This shows the most common child support enforcement actions.

Elements of the Redesign: Wallet card

MY PAYMENT INFO

Name of your child(ren) _____

FSR # _____

Monthly Payment Due _____

I WILL PAY:

☐ Weekly ☐ Biweekly ☐ Monthly

Each time I make a payment I will pay:

\$

If you cannot make your payments please call us at XXX-XXX-XXXX. For more information, please visit our website <https://childsupport.state.co.us>. We are here to help you.

I will make my first payment on _____

Make sure your full payment is processed by the 27th of each month.

S	M	T	W	Th	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

Circle the date(s) you plan to make payments.

ONLINE BANKING

Cost: **FREE**

Connect to the Colorado Family Support Registry through your online bank account. You will need to enter your FSR number and the FSR address:

Family Support Registry
P.O. Box 2171
Denver, CO 80201-2171

1 day to be processed.

AUTOPAY (RAW)

Cost: **FREE**

Enroll here:
<http://tinyurl.com/jpnfjvh>

Enrollment takes 5 days.

1 day to be processed.

PAY BY PHONE

Cost: **FREE**

Enroll here:
<http://tinyurl.com/gvyum3e>.
Receive your PIN in 5 days.

Call **1-800-374-6558**, enter your PIN, and choose payment amount.

1 day to be processed.

CHECK OR MONEY ORDER

Cost: **49¢** stamp plus a money order fee of **75¢ — \$1.25** if applicable.

Purchase money order at Walmart, 7-Eleven, or the post office.

Write your FSR number and name, and mail to:

Family Support Registry
P.O. Box 2171
Denver, CO 80201-2171

2-3 days to be processed from the day letter is received.

CASH

☐ **PayNearMe** (Cost: **\$1.99**)
Enroll online and bring your barcode.
Find payment locations at <http://tinyurl.com/zs39bjt>
3-4 days to be processed.

☐ **MoneyGram** (Cost: **\$4.99**)
Find payment locations at <http://tinyurl.com/oa5afwu>
Bring FSR number and "receive code" 14651.
3-4 days to be processed.

I will pay at > _____

CREDIT OR DEBIT CARD

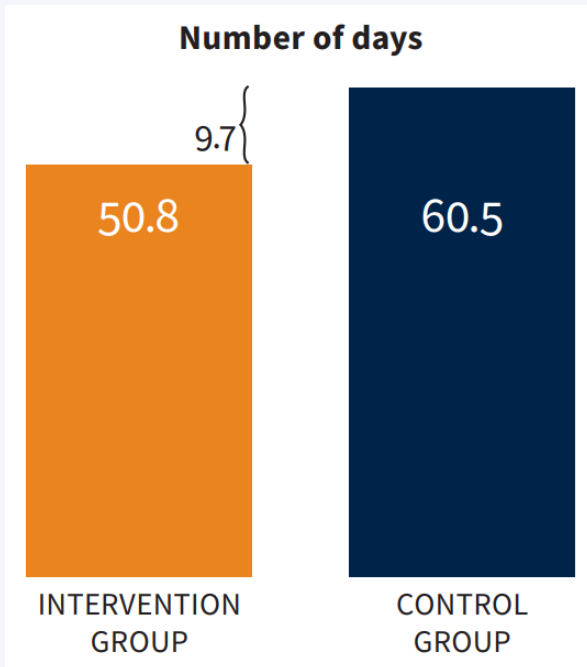
Value Payment Systems
Cost: **2.95%** of payment (e.g. \$5.90 for \$200 order) or **\$4.95**, whichever is greater.
Make payments at <http://tinyurl.com/jnbnze9>
3-4 days to be processed.

MoneyGram
Cost: **\$7.99** for payments under **\$300**. Fee varies with order amount.
Make payments at <http://tinyurl.com/zsulymt>
3-4 days to be processed.

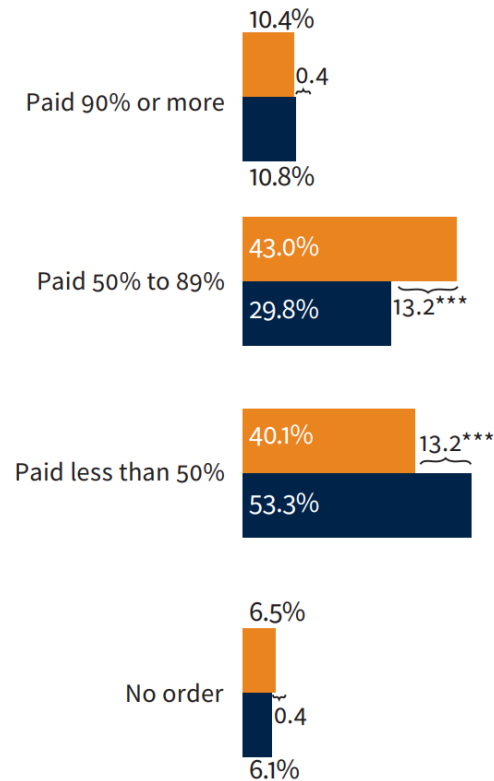
Intervention Results

- Parents who received the intervention paid more in the first three months, made their first payment earlier, and paid a greater amount of their order.

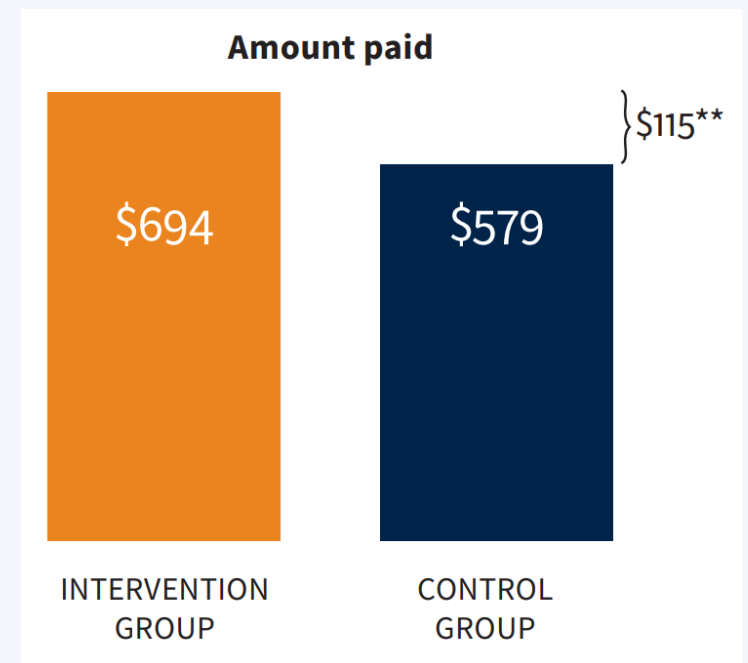
Average days until first payment



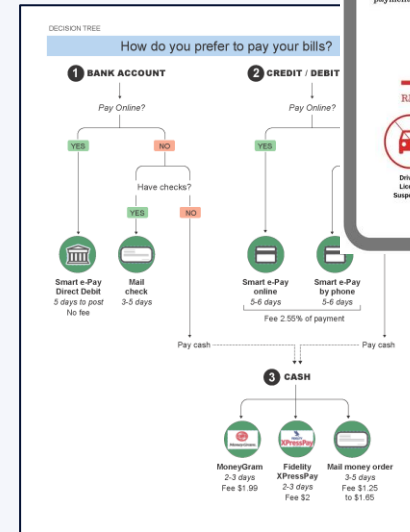
Percentages paid of total monthly amounts due (Months 1-3)



Average total amount paid during Months 1-3



How might the solution have been different is designed from HCD approach?



make my first payment on

ONLINE BANKING

Cost: FREE

Make sure your payment is processed by e 27th of each month.

Connect to the Colorado Family Support Registry through your online bank account. You will need to enter your FSR number and the FSR address.

Family Support Registry P.O. Box 2171 Denver, CO 80201-2171

1 day to be processed.

AUTOPAY / BANK

Cost: FREE

Enroll here: <http://viewurl.com/jen@lv>

Enrollment takes 5 days.

1 day to be processed.

1 the date(s) you plan to payments.

PAY BY PHONE

Cost: FREE

Enroll here: <http://viewurl.com/granville>

Reorder your PIN in 5 days.

Call 1-800-874-4556, enter your PIN, and choose payment amount.

1 day to be processed.

CHECK OR MONEY ORDER

Cost: 4% stamp plus a money order fee of 75¢ - \$1.25 if applicable.

Purchase money order at Walmart, 7-Eleven, or the post office.

Write your FSR number and name, and mail to:

Family Support Registry P.O. Box 2171 Denver, CO 80201-2171

2-3 days to be processed from the day letter is received.

CASH

PayNearMe (Cost: \$1.99)

Enroll online and bring your barcode.

Find payment locations at <http://viewurl.com/cash>

3-4 days to be processed.

MoneyGram (Cost: \$4.99)

Find payment locations at <http://viewurl.com/moneygram>

Bring FSR number and "receive code" 1445.

3-4 days to be processed.

CREDIT OR DEBIT CARD

Value Payment Systems

Cost: 2.9% of payment (e.g. \$5.99 for \$200 order) or \$4.95, whichever is greater.

Make payments at <http://viewurl.com/dollar9>

3-4 days to be processed.

MoneyGram

Cost: \$7.99 for payments under \$100. Fee varies with order amount.

Make payments at <http://viewurl.com/moneygram>

3-4 days to be processed.

Behavioral Economics & Human-Centered Design

