Traveler Experience

Planning and Regional Development 11/13/2019

JD Power data

We've spent a little time with the ASQ and JD Power data sets. A brief discussion follows.

It's worth asking this question up front: what's a primary goal of this exploration (or subsequent correlation analysis)? Is it to understand market segmentation at the airports? Or is it to find strong predictors of overall satisfaction?

We can address that later. For now, we see a number of files in the folders. But there are really two critical raw data files:

- 1. One ASQ raw data file from 2019 (ACI ASQ Survey Main_ Q3 2019 Data-EXCEL-v1.xlsx), and,
- 2. One JD Power raw data file from 2018 (Client_SPSS_File_W1W4 (1).csv).

Everything else is a PDF report or, in a couple of cases, Excel files that include synthesized tables or data dictionaries. That's as of the morning of 11/5.

We started with those two data files. In particular, we were interested in the JD Power data since it's potentially so rich and provides a new data source outside of ASQ.

The ASQ data from ACI is relatively clean.

The JD Power data set is rougher, but potentially very rich. It has more than 400 fields and around 40,000 observations taken from four survey visits (multiple days) each in late 2017 through fall 2018. The data "labels" are stored in a separate file with different formatting so we've transposed them and glued them to the master data set.

We're guessing "Overall.Satisfaction.Index" is the variable of interest. It appears to be scaled from, roughly, 100-1000, which seems to match some of the visualizations in the PDF reports:

```
## Min. 1st Qu. Median Mean 3rd Qu. Max.
## 99.99 659.42 787.28 764.84 887.09 1000.02
```

The JD Power data has 411 variables. We dropped 26 that promised little value or would actually get in the way of correlation analysis.

Here are the variable names after re-labeling and a quick summary of each. Notice the number of missing observations (NAs) and the variation in those missing observations' propensity across different variables. And, to make matters tougher, the missing observations' are distributed variously across survey respondents - they're not limited to certain questions. So when you try and just drop respondents with any NA answers or, conversely, drop survey questions with any NA responses, you're left with nothing.

(A list of varible names (labels) and summary statistics takes up the lion's share of this output, starting in a couple of pages.)

Understanding the missing data.

Is the data missing at random? (Hopefully.) And how much is missing?

Assuming the missing data is missing at random, we could impute some data points if NAs represent only a fraction of the total. Variables where the share of NAs are too large should probably be omitted.

Check for variables where much of the data is missing using a simple function.

Take a random-ish sample of 12% of the variables. (Just pick every 8th column.) Then take a truly random sample of 4,000 observations, which is around 10% of the full list of respondents.

Take a look for patterns in the missing observations. Here's a visualization:



This stuff definitely isn't missing at random. Some variables are missing around 20 percent of observations and that number looks very consistant across that group of variables. Then the share of missing observations increases, but it looks like it does it in a stepwise fashion - two or three variables at a time will have exactly the same number of missing observations. This continues all the way up until a collection of variables show

zero actual measurements - all observations there are missing.

A check of the data confirms that the first cluster of variables are all missing around 21 or 22 percent of their data.

That's way too consistent to be missing at random.

So we can evaluate NAs further or we can limit the data set to everything missing no more than that much data, then do some strategic selection or imputation and move forward.

Do a couple of things in order:

- 1. Identify variables with no (or practically no) missing observations and review the list.
- 2. Repeat, but including variables up to the 21 percent missing observation shelf.
- 3. Consider using subset #1 or #2 for some predictive work.
- 4. Perform #3 again but using ASQ data.
- 5. Compare top predictors across each data set. Anything interesting or surprising?

1. Variables (JD Power) with no NAs.

There are 40 variables without missing values:

##		V1
##	Foodbeverages.purchased	0
##	BooksMagazines	0
##	Clothing	0
##	Sunglasses	0
##	Electronics	0
##	Toiletries	0
##	Other.merchandise	0
##	Other.services	0
##	Didnt.purchase.any.merchandiseservices	0
##	Took.transportation.to.the.gate	0
##	Minutes.to.the.gate.after.security.check.point	0
	Clarity.of.signsdirections.inside.the.terminal	0
##	Cleanliness.of.terminal.concourses.and.hallways	0
##	Comfort.in.airport.eg.seating.roominess.etc	0
##	Availability.of.activityentertainment.options.in.the.airport	0
##	Overall.terminal.facilities.experience	0
##	Variety.of.food.beverage.and.retail.options	0
##	Cleanliness.of.terminal.restrooms	0
	Flight.departed	0
	How.would.you.rate.your.overall.experience.at.Airport.Evaluated	0
	Connecting. Region	0
##	Connecting.State	0
##	Airport	0
	DepartingArriving.Airport.vs.Connecting.Airport	0
##	The.signagedirections.were.cleareasy.to.understand	0
##	There.were.enough.signsdirections.throughout.the.terminal	0
	Recent.completed.renovations.or.new.buildings	0
##	Regional.art.culture.or.historical.displays	0
	Robots.tablet.interfacing.or.other.new.technology	0
	I.was.able.to.clearly.hear.and.understand.the.announcements.within.the.gate	0
	The.gate.area.was.clean	0
	There.were.enough.seats.at.the.gate	0
##	The.gate.area.was.comfortable	0

```
## There.were.enough.electrical.outlets.for.charging.phoneslaptops 0
## The.gate.area.was.worn.out.or.outdated 0
## Segment 0
## OSAT.Zones.of.Satisfaction 0
## weight 0
## Terminal.Facility.Index 0
## Overall.Satisfaction.Index 0
```

. Another eight have around 13 or 14 percent missing values:

##		V1
##	Minutes.to.get.through.the.security.check	14.94164
##	Amount.of.time.required.for.security.check	14.94164
##	Professionalism.of.security.staff	14.94164
##	Ability.of.security.process.to.make.you.feel.safe	14.94164
##	Overall.security.check.experience	14.94164
##	Time.spent.in.terminal.connecting.airport	13.60774
##	${\tt Time.to.get.through.security.check.connecting.airport}$	14.94164
##	Security.Index	14.94164

. Then 140 variables missing exactly 21.636 percent of their observations! Here they are:

##		V1
##	Within.North.AmericaLeisurePersonal.travel	21.63602
##	Outside.North.AmericaLeisurePersonal.travel	21.63602
##	Within.North.AmericaBusiness.travel	21.63602
##	Outside.North.AmericaBusiness.travel	21.63602
##	Within.North.AmericaBoth.leisure.personal.and.business.travel	21.63602
##	Outside.North.AmericaBoth.leisure.personal.and.business.travel	21.63602
##	Times.flown.past.three.months	21.63602
##	Trip.purpose	21.63602
##	Traveled.alone	21.63602
##	Adult.family.members.13.and.over	21.63602
##	One.or.more.children.12.years.old.and.under	21.63602
##	Friends	21.63602
##	Business.colleagues	21.63602
##	Airline.brand	21.63602
##	Flight.departure.time	21.63602
##	Flight.departure.timeAMPM	21.63602
##	Air.Canada.Aeroplan	21.63602
##	Alaska.AirlinesHorizon.Air.Mileage.Plan	21.63602
##	American.AirlinesAmerican.Eagle.AAdvantage	21.63602
##	Delta.Air.Lines.SkyMiles	21.63602
##	Frontier.Airlines.EarlyReturns	21.63602
##	HawaiianMiles	21.63602
	JetBlue.Airways.TrueBlue	21.63602
##	Southwest.Airlines.Rapid.Rewards	21.63602
##	Spirit.Airlines.Free.Spirit	21.63602
	United.Airlines.MileagePlus	21.63602
##	Virgin.America.Elevate	21.63602
##	WestJet.Rewards	21.63602
##	Other	21.63602
##	None	21.63602
##	Dont.know	21.63602
##	BrandImageEnvircarelessresp	21.63602
##	BrandImageInconsistentReliable	21.63602

##	BrandImageConventionalInnovative	21.63602
	BrandImageOldfashionedModern	21.63602
	BrandImageBoringExciting	21.63602
	BrandImageCrampedSpacious	21.63602
	BrandImageBottomlinePassenger	21.63602
	BrandImageBadGoodRep	21.63602
	Times.departed.from.Evaluated.Airport	21.63602
	How.traveled.to.Evaluated.Airport	21.63602
	Time.left.for.Evaluated.Airport	21.63602
##	Time.left.for.Evaluated.Airport.AMPM	21.63602
	Miles.traveled.to.Evaluated.Airport	21.63602
##	Transportation.method.used.to.leave.Evaluated.Airport	21.63602
##	Time.left.Evaluated.Airport	21.63602
##	Time.left.Evaluated.Airport.AMPM	21.63602
##	Miles.traveled.from.Evaluated.Airport	21.63602
##	Minutes.to.travel.from.Evaluated.Airport.to.destination	21.63602
##	Traffic.congestion.leaving.complex	21.63602
##	Preferred.transportation.mode	21.63602
##	Clarity.of.signsdirections	21.63602
##	Convenience.of.transportation	21.63602
##	Attractiveness.of.airport.grounds	21.63602
##	Ease.of.arriving.at.the.terminal	21.63602
	Ease.of.leaving.terminal	21.63602
	Traffic.flow.on.airport.grounds	21.63602
	Overall.airport.accessibility.experience	21.63602
	Place.of.checkin	21.63602
	Number.of.bags.checked.in	21.63602
	Easy.to.find.luggage.trolleys.when.entered.terminal	21.63602
	Airlineairport.responsible.for.handling.luggage	21.63602
	Ease.of.finding.checkinbaggage.check.location	21.63602
	Traffic.flow.at.checkinbaggage.check.area	21.63602
	Cleanliness.of.the.checkinbaggage.check.area	21.63602
	Overall.checkinbaggage.check.experience	21.63602
	Type.of.security.line	21.63602
	Lines.availableNumber.of.security.lines.available	21.63602
	Lines.openNumber.of.security.lines.available	21.63602
	Sign.to.inform.security.wait.times	21.63602
	Minutes.between.cleared.security.and.boarding.the.plane	21.63602
	Used.restrooms.in.terminal WiFi.connection.offered	21.63602
	W	21.63602
	Noise.level.at.the.airport	21.63602 21.63602
	Utilized.airport.lounge	21.63602
	Air.temperature.at.the.gate Wheelchair.servicecourtesy.cart	21.63602
	Obtained.checked.baggage	21.63602
	Went.through.immigrationcustoms	21.63602
	Likelihood.to.use.airport	21.63602
	Likelihood.to.recommend	21.63602
	Number.of.positive.recommendations	21.63602
	Number.of.negative.comments	21.63602
	Posted.comments.on.social.media	21.63602
	Number.times.read.online.travel.information	21.63602
	Wireless.Internet	21.63602
	Plug.for.your.computer.phone.etc	21.63602
	J 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	

##	Arcadegame.room	21.63602
	Personal.services.eg.massage.hair.salon.shoe.shine.etc	21.63602
	More.variety.of.food.andor.beverage	21.63602
	More.variety.of.retail.services	21.63602
	Premier.club	21.63602
##	Childrens.play.area	21.63602
##	Smoking.arealounge	21.63602
##	More.comfortable.seating.area	21.63602
##	Quiet.area	21.63602
##	Work.space.near.plug	21.63602
##	ATM	21.63602
##	Movie.theater	21.63602
##	Religious.facilities	21.63602
##	ExerciseHealth.club.facilities	21.63602
##	TV	21.63602
##	Other.6	21.63602
##	None.1	21.63602
##	Gender	21.63602
	Country	21.63602
	Birth.Year	21.63602
	Education	21.63602
	Marital.Status	21.63602
	WhiteCaucasian	21.63602
	BlackAfrican.American	21.63602
	AsianAsian.American	21.63602
	LatinoHispanic	21.63602
	Other.7	21.63602
	Prefer.not.to.answer	21.63602
	Household.annual.income Crowd within airport terminal building	21.63602
	Crowd.within.airport.terminal.building Likelihood.to.recommend.NPS	21.63602
		21.63602
	Notice.construction.at.airport Yes.and.it.was.obstructive	21.63602
	Yes.and.it.was.too.loud	21.63602
	Yes.and.it.did.not.disrupt.my.travel.experience	21.63602
	No.there.was.no.construction	21.63602
	Dont.know.1	21.63602
	Total.times.traveled.North.America.12.months	21.63602
	Total.times.traveled.outside.North.America.12.months	21.63602
	Total.times.traveled.12.months	21.63602
##	When.left.for.airport	21.63602
	Length.of.trip	21.63602
	NAflag	21.63602
##	Time.to.get.through.security.check.from.time.entered.airport.complex	21.63602
##	Time.to.get.through.security.check.from.time.entered.airport.complex.1	21.63602
##	NPS.Promoter	21.63602
##	NPS.Passive	21.63602
##	NPS.Detractor	21.63602
##	NPS.Recode	21.63602
##	NPS.Groups	21.63602
	Generation.Groups	21.63602
	Airport.Accessibility.Index	21.63602
##	Checkin.Index	21.63602

Future steps?

Visualizing the number of missing observations in one variable faceted (grouped) by another variable may shed light on whether they are missing by survey month - perhaps one question was asked during the April survey but not the other three surveys. Or maybe it varied by the person conducting the survey. Those are the two potential answers that come to mind.

APPENDIX

Full variable list (labels):

```
##
     [1] "Within.North.America..LeisurePersonal.travel"
     [2] "Outside.North.America..LeisurePersonal.travel"
##
##
     [3] "Within.North.America..Business.travel"
     [4] "Outside.North.America..Business.travel"
##
     [5] "Within.North.America..Both.leisure.personal.and.business.travel"
##
##
     [6] "Outside.North.America..Both.leisure.personal.and.business.travel"
##
     [7] "Times.flown.past.three.months"
##
     [8] "Trip.purpose"
##
     [9] "Traveled.alone"
    [10] "Adult.family.members.13.and.over"
    [11] "One.or.more.children.12.years.old.and.under"
##
    [12] "Friends"
   [13] "Business.colleagues"
##
   [14] "Airline.brand"
##
    [15] "Flight.departure.time"
##
   [16] "Flight.departure.time..AMPM"
   [17] "Air.Canada.Aeroplan"
##
##
   [18] "Alaska.AirlinesHorizon.Air.Mileage.Plan"
##
   [19] "American.AirlinesAmerican.Eagle.AAdvantage"
   [20] "Delta.Air.Lines.SkyMiles"
##
   [21] "Frontier.Airlines.EarlyReturns"
  [22] "HawaiianMiles"
##
##
    [23] "JetBlue.Airways.TrueBlue"
   [24] "Southwest.Airlines.Rapid.Rewards"
##
   [25] "Spirit.Airlines.Free.Spirit"
   [26] "United.Airlines.MileagePlus"
##
   [27] "Virgin.America.Elevate"
  [28] "WestJet.Rewards"
##
  [29] "Other"
##
##
   [30] "None"
   [31] "Dont.know"
   [32] "Air.Canada.FF.Level"
##
   [33] "American.Airlines.FF.Level"
   [34] "Delta.Air.Lines.FF.Level"
##
##
   [35] "Alaska.Airlines.FF.Level"
  [36] "United.FF.Level"
##
   [37] "Frontier.Airlines.FF.Level"
##
    [38] "JetBlue.Airways.FF.Level"
##
##
    [39] "Southwest.Airlines.FF.Level"
   [40] "Hawaiian.Airlines.FF.Level"
##
##
   [41] "Spirit.Airlines.FF.Level"
    [42] "Virgin.America.FF.Level"
   [43] "BrandImageEnvircarelessresp"
##
   [44] "BrandImageInconsistentReliable"
   [45] "BrandImageConventionalInnovative"
##
##
   [46] "BrandImageOldfashionedModern"
##
   [47] "BrandImageBoringExciting"
   [48] "BrandImageCrampedSpacious"
   [49] "BrandImageBottomlinePassenger"
```

```
[50] "BrandImageBadGoodRep"
##
   [51] "Times.departed.from.Evaluated.Airport"
  [52] "How.traveled.to.Evaluated.Airport"
  [53] "Time.left.for.Evaluated.Airport"
   [54] "Time.left.for.Evaluated.Airport.AMPM"
##
  [55] "Miles.traveled.to.Evaluated.Airport"
  [56] "Traffic.congestion"
  [57] "Public.transportation.present"
##
    [58] "How.often.public.transportation.used"
  [59] "Likelihood.to.use.public.transportation"
##
  [60] "Parked.at"
  [61] "Minutes.after.parking.to.travel.to.terminal"
##
  [62] "Method.of.payment.for.parking.fees"
  [63] "Parking.fees.vs.expectations"
##
  [64] "Ease.of.entrance"
   [65] "Availability.of.parking.spaces"
##
##
   [66] "Safety.and.security"
   [67] "Variety.of.parking.options.eg.garage.surface.lot.valet.reserved.parking.etc"
   [68] "Cleanliness.of.the.parking.facilities"
   [69] "Clarity.of.signsdirections"
##
  [70] "Convenience.to.terminal"
  [71] "Reasonableness.of.the.price"
  [72] "Overall.parking.experience"
##
    [73] "Easy.to.find.loadingunloading.area"
  [74] "Easy.to.find.transportation.service.to.Evaluated.Airport"
##
   [75] "Ease.of.dropping.off"
  [76] "Safety.and.security.1"
##
   [77] "Clarity.of.signsdirections.1"
  [78] "Convenience.to.terminal.1"
##
  [79] "Overall.drop.off.experience"
##
  [80] "Rental.car.facility.signage"
  [81] "Shuttle.needed"
  [82] "Who.operated.shuttle"
##
  [83] "Wait.time.for.shuttle.to.Evaluated.Airport"
   [84] "Minutes.to.terminal.after.boarding.shuttle"
##
  [85] "Ease.of.entrance.1"
## [86] "Safety.and.security.2"
## [87] "Cleanliness.of.the.rental.car.facilities"
   [88] "Clarity.of.signsdirections.2"
##
  [89] "Convenience.to.terminal.2"
##
  [90] "Overall.rental.car.facility.experience"
  [91] "How.often.public.transportation.used.1"
  [92] "Frequency.of.public.transportation.service"
##
  [93] "Safety.and.security.3"
  [94] "Cleanliness.of.the.public.transportation.facilities"
  [95] "Clarity.of.signsdirections.3"
##
   [96] "Convenience.to.terminal.3"
##
  [97] "Overall.public.transportation.experience"
  [98] "Transportation.method.used.to.leave.Evaluated.Airport"
## [99] "Time.left.Evaluated.Airport"
## [100] "Time.left.Evaluated.Airport.AMPM"
## [101] "Miles.traveled.from.Evaluated.Airport"
## [102] "Minutes.to.travel.from.Evaluated.Airport.to.destination"
## [103] "Traffic.congestion.leaving.complex"
```

```
## [104] "Preferred.transportation.mode"
## [105] "Clarity.of.signs..directions"
## [106] "Convenience.of.transportation"
## [107] "Attractiveness.of.airport.grounds"
## [108] "Ease.of.arriving.at.the.terminal"
## [109] "Ease.of.leaving.terminal"
## [110] "Traffic.flow.on.airport.grounds"
## [111] "Overall.airport.accessibility.experience"
## [112] "Place.of.checkin"
## [113] "Number.of.bags.checked.in"
## [114] "Easy.to.find.luggage.trolleys.when.entered.terminal"
## [115] "Place.for.luggage.checkin"
## [116] "Airlineairport.responsible.for.handling.luggage"
## [117] "Minutes.to.obtain.boarding.pass"
## [118] "Ease.of.finding.checkinbaggage.check.location"
## [119] "Traffic.flow.at.checkinbaggage.check.area"
## [120] "Cleanliness.of.the.checkinbaggage.check.area"
## [121] "Overall.checkinbaggage.check.experience"
## [122] "Type.of.security.line"
## [123] "Lines.available..Number.of.security.lines.available"
## [124] "Lines.open..Number.of.security.lines.available"
## [125] "Sign.to.inform.security.wait.times"
## [126] "Singled.out.for.special.TSA.screening"
## [127] "Minutes.between.cleared.security.and.boarding.the.plane"
## [128] "Foodbeverages.purchased.beforeafter.security"
## [129] "Healthy.foodbeverage.options"
## [130] "Importance.of.healthy.foodbeverage.options"
## [131] "Were.local.restaurant.or.food.choices.ie.nonchain.restaurants.available.at.Airport.Evaluated"
## [132] "Foodbeverages.wanted.found"
## [133] "Not.hungry"
## [134] "Brought.my.own.food"
## [135] "Didnt.like.the.choices"
## [136] "Too.expensive"
## [137] "No.time"
## [138] "Other.1"
## [139] "Shopped.at.retail.stores.beforeafter.security"
## [140] "Didnt.have.time"
## [141] "Too.expensive.1"
## [142] "Didnt.have.what.I.need"
## [143] "No.need.to.shop"
## [144] "Other.2"
## [145] "Arriving.on.the.airport.grounds"
## [146] "Checkin"
## [147] "Security"
## [148] "Gate.area"
## [149] "Baggage.claim.area"
## [150] "Ground.transportation.eg.taxi.shuttle.etc"
## [151] "Restrooms"
## [152] "Food.and.beverage"
## [153] "Retail.shops"
## [154] "Flight.monitors.eg.arrivaldeparture.info"
## [155] "Parking.structures"
## [156] "Other.3"
```

[157] "Used.restrooms.in.terminal"

```
## [158] "WiFi.connection.offered"
## [159] "WiFi.connection.speed"
## [160] "Noise.level.at.the.airport"
## [161] "Utilized.airport.lounge"
## [162] "Air.temperature.at.the.gate"
## [163] "Wheelchair.servicecourtesy.cart"
## [164] "Plane.not.there"
## [165] "Mechanical.problems"
## [166] "Bad.weather.where.you.were"
## [167] "Bad.weather.where.you.were.going"
## [168] "Crew.not.there"
## [169] "Gate.not.available.at.destination"
## [170] "Delay.in.landing"
## [171] "Flight.overbooked"
## [172] "Too.much.carryon.baggage"
## [173] "Security.issue"
## [174] "Passengers.late.arrivalsslow"
## [175] "Runway.trafficAir.traffic.control"
## [176] "Other.4"
## [177] "I.dont.know.the.cause.of.the.delay"
## [178] "How.many.minutes.was.your.flight.delayed"
## [179] "Obtained.checked.baggage"
## [180] "Minutes.to.get.to.the.baggage.claim.area"
## [181] "Minutes.waited.at.the.baggage.claim.area"
## [182] "All.baggage.received"
## [183] "Easy.to.find.luggage.trolleys.in.baggage.claim.area"
## [184] "Ease.of.finding.your.baggage.claim.areacarousel"
## [185] "Physical.conditioncleanliness.of.baggage.claim.area"
## [186] "Speed.of.baggage.delivery"
## [187] "Overall.baggage.claim.experience"
## [188] "Went.through.immigrationcustoms"
## [189] "Used.kiosk"
## [190] "Minutes.to.get.through.immigrationcustoms"
## [191] "Overall.immigrationcustoms.experience"
## [192] "Likelihood.to.use.airport"
## [193] "Likelihood.to.recommend"
## [194] "Number.of.positive.recommendations"
## [195] "Number.of.negative.comments"
## [196] "Posted.comments.on.social.media"
## [197] "Yelp"
## [198] "Facebook"
## [199] "Twitter"
## [200] "Instagram"
## [201] "Tumblr"
## [202] "YouTube"
## [203] "LinkedIn"
## [204] "Trip.Advisor"
## [205] "Other.blog"
## [206] "Other.forum"
## [207] "Other.ratingreview.sites"
## [208] "Other.5"
## [209] "Dont.knowdont.remember"
## [210] "Number.times.read.online.travel.information"
## [211] "Wireless.Internet"
```

```
## [212] "Plug.for.your.computer.phone.etc"
## [213] "Arcadegame.room"
## [214] "Personal.services.eg.massage.hair.salon.shoe.shine.etc"
## [215] "More.variety.of.food.andor.beverage"
## [216] "More.variety.of.retail.services"
## [217] "Premier.club"
## [218] "Childrens.play.area"
## [219] "Smoking.arealounge"
## [220] "More.comfortable.seating.area"
## [221] "Quiet.area"
## [222] "Work.space.near.plug"
## [223] "ATM"
## [224] "Movie.theater"
## [225] "Religious.facilities"
## [226] "ExerciseHealth.club.facilities"
## [227] "TV"
## [228] "Other.6"
## [229] "None.1"
## [230] "Gender"
## [231] "Country"
## [232] "Birth.Year"
## [233] "Education"
## [234] "Marital.Status"
## [235] "WhiteCaucasian"
## [236] "BlackAfrican.American"
## [237] "AsianAsian.American"
## [238] "LatinoHispanic"
## [239] "Other.7"
## [240] "Prefer.not.to.answer"
## [241] "Household.annual.income"
## [242] "Did.you.have.to.go.through.security.again.at.connecting.airport"
## [243] "Crowd.within.airport.terminal.building"
## [244] "Likelihood.to.recommend.NPS"
## [245] "WestJet.FF.Level"
## [246] "Notice.construction.at.airport"
## [247] "Had.to.wait.in.line.for.the.restrooms"
## [248] "Stall.was.in.good.condition.eg.free.of.broken.or.worn.out.parts"
## [249] "Countertops.and.floors.were.dry"
## [250] "Floors.were.in.good.repair"
## [251] "Fixtures.were.working.eg.faucets.soap.dispenser.hand.dryer.etc"
## [252] "Walls.were.free.of.markings.and.graffiti"
## [253] "Restrooms.felt.cramped.for.space"
## [254] "Overall.restrooms.were.clean"
## [255] "Yes.and.it.was.obstructive"
## [256] "Yes.and.it.was.too.loud"
## [257] "Yes.and.it.did.not.disrupt.my.travel.experience"
## [258] "No.there.was.no.construction"
## [259] "Dont.know.1"
## [260] "Parking"
## [261] "Checkin.area"
## [262] "Security.area"
## [263] "Gate.area.1"
## [264] "Baggage.claim.area.1"
```

[265] "Ground.transportation.area.eg.taxi.shuttle.etc"

```
## [266] "Restrooms.1"
## [267] "Food.and.beverage.areas"
## [268] "Retail.shops.area"
## [269] "Other.8"
## [270] "Total.times.traveled.North.America.12.months"
## [271] "Total.times.traveled.outside.North.America.12.months"
## [272] "Total.times.traveled.12.months"
## [273] "When.left.for.airport"
## [274] "Length.of.trip"
## [275] "Dollars.paid.for.parking.fees"
## [276] "Dollars.paid.for.transportation.service.to.Evaluated.Airport"
## [277] "Dollars.paid.for.rental.car"
## [278] "Dollars.paid.for.public.transportation.service.to.Airport"
## [279] "Dollars.paid.for.WiFi.connection"
## [280] "NAflag"
## [281] "Time.to.travel.to.terminal.after.parking"
## [282] "Time.to.wait.for.shuttle.busvan.to.take.you.to.airport"
## [283] "Time.to.travel.to.airport.terminal.once.boarded.shuttle.busvan"
## [284] "Time.to.obtain.boarding.pass.andor.check.baggage"
## [285] "Time.to.get.through.security.check.from.time.entered.airport.complex"
## [286] "Time.to.get.through.security.check.from.time.entered.airport.complex.1"
## [287] "NPS.Promoter"
## [288] "NPS.Passive"
## [289] "NPS.Detractor"
## [290] "NPS.Recode"
## [291] "NPS.Groups"
## [292] "Minutes.to.get.through.the.security.check"
## [293] "Amount.of.time.required.for.security.check"
## [294] "Professionalism.of.security.staff"
## [295] "Ability.of.security.process.to.make.you.feel.safe"
## [296] "Overall.security.check.experience"
## [297] "Foodbeverages.purchased"
## [298] "RestaurantBar"
## [299] "Fast.food.chain"
## [300] "Convenience.store"
## [301] "Standalone.kiosk"
## [302] "Vending.machine"
## [303] "Other.10"
## [304] "Variety.of.menu.choices"
## [305] "QualityTaste.of.food.and.beverage"
## [306] "Ambiance.atmosphere"
## [307] "Courtesy.of.staff"
## [308] "Timeliness.of.your.order"
## [309] "Cleanliness.of.area"
## [310] "Reasonableness.of.the.price.1"
## [311] "Overall.restaurant.experience"
## [312] "Quality.of.food.and.beverage"
## [313] "Variety.of.food.and.beverage"
## [314] "Reasonableness.of.the.price.2"
## [315] "Speed.of.service"
## [316] "Availability.of.nearby.seating"
## [317] "Overall.food..beverage.experience"
## [318] "BooksMagazines"
```

[319] "Clothing"

```
## [320] "Sunglasses"
## [321] "Electronics"
## [322] "Toiletries"
## [323] "Other.merchandise"
## [324] "Other.services"
## [325] "Didnt.purchase.any.merchandiseservices"
## [326] "Quality.of.merchandiseservices"
## [327] "Variety.of.shops"
## [328] "Reasonableness.of.the.price.3"
## [329] "Professionalism.of.staff"
## [330] "Overall.retail.services.experience"
## [331] "Now.that.you.have.considered.your.food.beverage..retail.experiences.how.would.you.rate.your..
## [332] "Took.transportation.to.the.gate"
## [333] "Type.of.transportation.taken.to.the.gate"
## [334] "Minutes.to.the.gate.after.security.check.point"
## [335] "Clarity.of.signsdirections.inside.the.terminal"
## [336] "Cleanliness.of.terminal.concourses.and.hallways"
## [337] "Comfort.in.airport.eg.seating.roominess.etc"
## [338] "Availability.of.activityentertainment.options.in.the.airport"
## [339] "Overall.terminal.facilities.experience"
## [340] "Variety.of.food.beverage.and.retail.options"
## [341] "Cleanliness.of.terminal.restrooms"
## [342] "Flight.departed"
## [343] "How.would.you.rate.your.overall.experience.at.Airport.Evaluated"
## [344] "Connecting.Region"
## [345] "Connecting.State"
## [346] "Airport"
## [347] "Dollars.paid.per.person.at.restaurantbar"
## [348] "Dollars.spent.on.foodbeverages"
## [349] "Dollars.spent.on.merchandiseservices"
## [350] "Amount.spent.in.terminal.USD"
## [351] "Time.spent.in.terminal.connecting.airport"
## [352] "Time.to.get.through.security.check.connecting.airport"
## [353] "DepartingArriving.Airport.vs.Connecting.Airport"
## [354] "The.signagedirections.were.cleareasy.to.understand"
## [355] "There.were.enough.signsdirections.throughout.the.terminal"
## [356] "Recent.completed.renovations.or.new.buildings"
## [357] "Regional.art.culture.or.historical.displays"
## [358] "Robots.tablet.interfacing.or.other.new.technology"
## [359] "I.was.able.to.clearly.hear.and.understand.the.announcements.within.the.gate"
## [360] "The.gate.area.was.clean"
## [361] "There.were.enough.seats.at.the.gate"
## [362] "The.gate.area.was.comfortable"
## [363] "There.were.enough.electrical.outlets.for.charging.phoneslaptops"
## [364] "The.gate.area.was.worn.out.or.outdated"
## [365] "Segment"
## [366] "Generation.Groups"
## [367] "OSAT.Zones.of.Satisfaction"
## [368] "Age"
## [369] "weight"
## [370] "Parking.Index"
## [371] "Dropoff.Index"
## [372] "Rental.Car.Index"
```

[373] "Public.Transp.Index"

```
## [374] "RestaurantBar.Index"
## [375] "Other.Food.and.Beverage.Index"
## [376] "Retail.MerchandiseServices.Index"
## [377] "Food.and.Beverage.Index"
## [378] "Food.Beverage.and.Retail.Index"
## [380] "Airport.Accessibility.Index"
## [381] "Security.Index"
## [381] "Security.Index"
## [382] "Terminal.Facility.Index"
## [383] "Baggage.Claim.Index"
## [384] "Overall.Satisfaction.Index"
## [385] "Immigration..Customs.Index"
```

Summaries of each:

```
## Within.North.America..LeisurePersonal.travel
## Min. : 0.000
## 1st Qu.: 1.000
## Median: 2.000
        : 3.293
## Mean
## 3rd Qu.: 4.000
## Max.
        :100.000
## NA's
          :8694
## Outside.North.America..LeisurePersonal.travel
## Min. : 0.000
## 1st Qu.: 0.000
## Median: 0.000
## Mean
        : 0.821
## 3rd Qu.: 1.000
## Max.
         :100.000
## NA's
          :8694
## Within.North.America..Business.travel
## Min. : 0.000
## 1st Qu.: 0.000
## Median : 0.000
## Mean
         : 1.695
## 3rd Qu.: 1.000
## Max.
         :100.000
## NA's
          :8694
## Outside.North.America..Business.travel
## Min. : 0.000
## 1st Qu.: 0.000
## Median : 0.000
## Mean
        : 0.408
## 3rd Qu.: 0.000
## Max.
         :100.000
## NA's
          :8694
## Within.North.America..Both.leisure.personal.and.business.travel
## Min. : 0.00
## 1st Qu.: 0.00
## Median : 0.00
## Mean : 1.32
## 3rd Qu.: 1.00
```

```
:100.00
## Max.
## NA's
          :8694
## Outside.North.America..Both.leisure.personal.and.business.travel
          : 0.000
   1st Qu.: 0.000
## Median: 0.000
  Mean
         : 0.427
   3rd Qu.: 0.000
##
## Max.
          :100.000
## NA's
          :8694
## Times.flown.past.three.months Trip.purpose
                                                Traveled.alone
## Min. : 1.000
                                      :1.000
                                Min.
                                                Min. :0.000
  1st Qu.: 1.000
                                1st Qu.:1.000
                                                1st Qu.:0.000
## Median: 2.000
                                Median :1.000
                                                Median : 0.000
## Mean
         : 2.382
                                Mean
                                      :1.286
                                                Mean
                                                     :0.449
## 3rd Qu.: 2.000
                                3rd Qu.:1.000
                                                3rd Qu.:1.000
## Max.
          :100.000
                                Max.
                                       :3.000
                                                Max.
                                                       :1.000
          :8694
## NA's
                                NA's
                                       :8694
                                                NA's
                                                       :8694
  Adult.family.members.13.and.over
          :0.000
##
  1st Qu.:0.000
## Median :0.000
## Mean :0.435
##
   3rd Qu.:1.000
## Max.
          :1.000
          :8694
## One.or.more.children.12.years.old.and.under
                                                 Friends
## Min.
          :0.000
                                              Min.
                                                     :0.00
## 1st Qu.:0.000
                                              1st Qu.:0.00
## Median :0.000
                                              Median:0.00
## Mean :0.089
                                              Mean
                                                    :0.09
## 3rd Qu.:0.000
                                              3rd Qu.:0.00
## Max.
          :1.000
                                                     :1.00
                                              Max.
## NA's
          :8694
                                              NA's
                                                     :8694
## Business.colleagues Airline.brand Flight.departure.time
## Min.
          :0.000
                       Min.
                             : 1.0
                                     Min.
                                           : 1.0
##
  1st Qu.:0.000
                       1st Qu.: 4.0
                                     1st Qu.: 5.0
## Median :0.000
                       Median: 7.0
                                     Median: 8.0
## Mean :0.032
                       Mean :10.2
                                     Mean :20.8
## 3rd Qu.:0.000
                                     3rd Qu.:11.0
                       3rd Qu.: 9.0
## Max.
          :1.000
                       Max.
                             :99.0
                                     Max.
                                            :95.0
## NA's
          :8694
                       NA's
                              :8694
                                     NA's
                                            :8694
## Flight.departure.time..AMPM Air.Canada.Aeroplan
## Min. : 1.00
                              Min.
                                     :0.000
  1st Qu.: 1.00
                              1st Qu.:0.000
## Median : 2.00
                              Median :0.000
## Mean :16.34
                              Mean :0.083
## 3rd Qu.: 2.00
                              3rd Qu.:0.000
## Max.
          :95.00
                              Max.
                                     :1.000
## NA's
          :8694
                              NA's
                                     :8694
## Alaska.AirlinesHorizon.Air.Mileage.Plan
## Min.
          :0.000
## 1st Qu.:0.000
## Median :0.000
```

```
## Mean
          :0.095
##
   3rd Qu.:0.000
          :1.000
## Max.
          :8694
## NA's
## American.AirlinesAmerican.Eagle.AAdvantage Delta.Air.Lines.SkyMiles
## Min.
          :0.000
                                             Min.
                                                  :0.000
  1st Qu.:0.000
                                             1st Qu.:0.000
## Median:0.000
                                             Median : 0.000
## Mean :0.319
                                             Mean :0.368
## 3rd Qu.:1.000
                                             3rd Qu.:1.000
## Max.
          :1.000
                                             Max.
                                                    :1.000
## NA's
          :8694
                                             NA's
                                                    :8694
## Frontier.Airlines.EarlyReturns HawaiianMiles
                                                 JetBlue.Airways.TrueBlue
## Min.
                                 Min.
                                        :0.000
         :0.000
                                                 Min.
                                                       :0.000
## 1st Qu.:0.000
                                 1st Qu.:0.000
                                                 1st Qu.:0.000
## Median :0.000
                                 Median :0.000
                                                 Median : 0.000
## Mean
         :0.052
                                 Mean :0.044
                                                 Mean :0.144
  3rd Qu.:0.000
                                 3rd Qu.:0.000
                                                 3rd Qu.:0.000
## Max.
          :1.000
                                 Max.
                                        :1.000
                                                 Max.
                                                       :1.000
## NA's
          :8694
                                 NA's
                                        :8694
                                                 NA's
                                                        :8694
## Southwest.Airlines.Rapid.Rewards Spirit.Airlines.Free.Spirit
          :0.000
                                  Min.
                                         :0.000
  1st Qu.:0.000
                                   1st Qu.:0.000
##
## Median:0.000
                                   Median :0.000
## Mean :0.338
                                   Mean :0.049
## 3rd Qu.:1.000
                                   3rd Qu.:0.000
## Max.
          :1.000
                                   Max.
                                          :1.000
                                   NA's
                                          :8694
          :8694
## United.Airlines.MileagePlus Virgin.America.Elevate WestJet.Rewards
## Min.
          :0.000
                              Min. :0.00
                                                     Min.
                                                           :0.000
## 1st Qu.:0.000
                              1st Qu.:0.00
                                                     1st Qu.:0.000
## Median :0.000
                              Median:0.00
                                                     Median : 0.000
## Mean :0.289
                              Mean :0.03
                                                     Mean :0.035
##
   3rd Qu.:1.000
                              3rd Qu.:0.00
                                                     3rd Qu.:0.000
##
   Max. :1.000
                              Max.
                                     :1.00
                                                     Max. :1.000
##
   NA's
          :8694
                              NA's
                                     :8694
                                                     NA's
                                                            :8694
##
       Other
                        None
                                    Dont.know
                                                 Air.Canada.FF.Level
##
  Min.
          :0.000
                   Min. :0.000
                                  Min. :0.00
                                                 Min. : 1.00
   1st Qu.:0.000
                   1st Qu.:0.000
                                  1st Qu.:0.00
                                                 1st Qu.: 1.00
  Median:0.000
                   Median :0.000
##
                                  Median :0.00
                                                 Median: 1.00
  Mean :0.021
                   Mean :0.185
                                  Mean :0.01
                                                 Mean : 6.77
## 3rd Qu.:0.000
                   3rd Qu.:0.000
                                  3rd Qu.:0.00
                                                 3rd Qu.: 3.00
## Max.
         :1.000
                   Max.
                         :1.000
                                  Max. :1.00
                                                 Max.
                                                        :99.00
## NA's
          :8694
                   NA's
                          :8694
                                  NA's
                                         :8694
                                                 NA's
                                                        :37585
  American.Airlines.FF.Level Delta.Air.Lines.FF.Level
                             Min. : 1.000
## Min. : 1.000
  1st Qu.: 1.000
                             1st Qu.: 1.000
## Median : 1.000
                             Median : 1.000
## Mean : 6.604
                             Mean : 6.654
## 3rd Qu.: 2.000
                             3rd Qu.: 2.000
## Max.
        :99.000
                             Max.
                                  :99.000
## NA's :30124
                             NA's :28593
## Alaska.Airlines.FF.Level United.FF.Level Frontier.Airlines.FF.Level
## Min. : 1.00
                           Min. : 1.000 Min. : 1.00
```

```
1st Qu.: 1.000
## 1st Qu.: 1.00
                                           1st Qu.: 1.00
##
  Median: 1.00
                           Median : 1.000
                                           Median: 1.00
                           Mean : 5.824
                                           Mean : 7.78
  Mean : 5.68
                           3rd Qu.: 2.000
##
  3rd Qu.: 2.00
                                           3rd Qu.: 1.00
   Max.
         :99.00
                           Max. :99.000
                                           Max.
                                                  :99.00
## NA's
          :37180
                           NA's
                                  :31067
                                           NA's
                                                  :38537
  JetBlue.Airways.FF.Level Southwest.Airlines.FF.Level
## Min. : 1.00
                           Min. : 1.000
##
  1st Qu.: 1.00
                           1st Qu.: 1.000
## Median : 1.00
                           Median : 1.000
## Mean : 4.45
                           Mean : 5.068
## 3rd Qu.: 1.00
                           3rd Qu.: 1.000
## Max. :99.00
                           Max. :99.000
## NA's
        :35659
                           NA's
                                 :29524
## Hawaiian.Airlines.FF.Level Spirit.Airlines.FF.Level
## Min. : 1.00
                             Min. : 1.00
##
  1st Qu.: 1.00
                             1st Qu.: 1.00
## Median: 1.00
                             Median: 1.00
## Mean : 3.74
                             Mean : 8.07
## 3rd Qu.: 1.00
                             3rd Qu.: 2.00
## Max.
        :99.00
                             Max.
                                   :99.00
## NA's
          :38785
                             NA's
                                  :38646
## Virgin.America.FF.Level BrandImageEnvircarelessresp
## Min. : 1.00
                          Min. : 1.00
##
  1st Qu.: 1.00
                          1st Qu.: 5.00
## Median: 1.00
                          Median: 6.00
## Mean : 4.99
                          Mean :23.12
   3rd Qu.: 2.00
                          3rd Qu.: 7.00
## Max. :99.00
                          Max.
                               :99.00
## NA's :39241
                          NA's
                                 :8694
## BrandImageInconsistentReliable BrandImageConventionalInnovative
## Min. : 1.00
                                 Min. : 1.000
  1st Qu.: 5.00
                                 1st Qu.: 4.000
## Median: 6.00
                                 Median : 5.000
                                 Mean : 7.879
## Mean :10.14
## 3rd Qu.: 7.00
                                 3rd Qu.: 7.000
## Max. :99.00
                                 Max.
                                       :99.000
## NA's
          :8694
                                 NA's
                                       :8694
   BrandImageOldfashionedModern BrandImageBoringExciting
                               Min. : 1.000
## Min. : 1.000
  1st Qu.: 5.000
                               1st Qu.: 4.000
                               Median : 5.000
## Median : 6.000
## Mean : 7.082
                               Mean : 6.866
## 3rd Qu.: 7.000
                               3rd Qu.: 6.000
## Max.
         :99.000
                               Max.
                                    :99.000
## NA's
                               NA's
          :8694
                                      :8694
## BrandImageCrampedSpacious BrandImageBottomlinePassenger
         : 1.000
                            Min. : 1.00
## 1st Qu.: 4.000
                            1st Qu.: 5.00
## Median : 6.000
                            Median: 6.00
## Mean
         : 6.396
                            Mean
                                  :14.76
## 3rd Qu.: 7.000
                            3rd Qu.: 7.00
## Max. :99.000
                            Max.
                                   :99.00
## NA's
          :8694
                            NA's
                                   :8694
```

```
BrandImageBadGoodRep Times.departed.from.Evaluated.Airport
## Min.
          : 1.00
                        Min. : 1.000
## 1st Qu.: 5.00
                        1st Qu.: 1.000
## Median: 6.00
                        Median : 2.000
## Mean
         :13.81
                        Mean : 2.735
##
   3rd Qu.: 7.00
                        3rd Qu.: 3.000
## Max.
          :99.00
                        Max.
                              :50.000
                        NA's
## NA's
          :8694
                             :8694
## How.traveled.to.Evaluated.Airport Time.left.for.Evaluated.Airport
## Min. : 1.000
                                    Min. : 1.000
## 1st Qu.: 2.000
                                    1st Qu.: 4.000
## Median : 3.000
                                    Median : 6.000
         : 6.198
                                           : 5.987
## Mean
                                    Mean
## 3rd Qu.: 5.000
                                    3rd Qu.: 8.000
## Max.
          :97.000
                                    Max.
                                           :12.000
## NA's
          :8694
                                    NA's
                                           :8694
## Time.left.for.Evaluated.Airport.AMPM Miles.traveled.to.Evaluated.Airport
                                       Min.
                                              : 0.00
## 1st Qu.:1.000
                                       1st Qu.: 10.00
## Median :1.000
                                       Median : 20.00
## Mean
         :1.381
                                       Mean
                                              : 36.45
## 3rd Qu.:2.000
                                       3rd Qu.: 40.00
## Max.
          :2.000
                                       Max.
                                              :300.00
## NA's
          :8694
                                       NA's
                                              :8694
## Traffic.congestion Public.transportation.present
         : 1.000
                     Min. : 0.00
## 1st Qu.: 3.000
                      1st Qu.: 1.00
## Median : 3.000
                      Median: 1.00
## Mean
                             :35.31
         : 4.012
                      Mean
## 3rd Qu.: 4.000
                      3rd Qu.:99.00
## Max.
          :99.000
                      Max.
                             :99.00
## NA's
          :11470
                      NA's
                             :10457
## How.often.public.transportation.used
## Min. : 0.000
## 1st Qu.: 0.000
## Median: 0.000
## Mean : 1.616
## 3rd Qu.: 2.000
## Max.
          :99.000
## NA's
          :24703
## Likelihood.to.use.public.transportation
                                            Parked.at
## Min. : 1.00
                                          Min. : 1.00
## 1st Qu.: 2.00
                                          1st Qu.: 1.00
## Median: 2.00
                                          Median: 4.00
## Mean
         :13.61
                                          Mean
                                                 : 6.79
                                          3rd Qu.: 6.00
## 3rd Qu.: 3.00
          :99.00
                                                 :97.00
## Max.
                                          Max.
## NA's
          :25937
                                          NA's
                                                 :33744
## Minutes.after.parking.to.travel.to.terminal
## Min. : 0.00
## 1st Qu.: 5.00
## Median :10.00
## Mean :10.02
## 3rd Qu.:15.00
```

```
:90.00
## Max.
## NA's
         :33744
## Method.of.payment.for.parking.fees Parking.fees.vs.expectations
          : 1.00
                                    Min.
                                          :1.00
## 1st Qu.: 1.00
                                     1st Qu.:2.00
## Median : 2.00
                                    Median:2.00
## Mean : 6.26
                                    Mean :1.93
## 3rd Qu.: 2.00
                                     3rd Qu.:2.00
## Max.
         :97.00
                                    Max.
                                           :3.00
## NA's
         :33744
                                    NA's
                                           :33744
## Ease.of.entrance Availability.of.parking.spaces Safety.and.security
## Min. : 1.00
                   Min. : 1.00
                                                 Min. : 1.00
## 1st Qu.: 7.00
                   1st Qu.: 7.00
                                                 1st Qu.: 7.00
## Median: 8.00
                   Median: 8.00
                                                 Median: 8.00
## Mean :10.98
                   Mean
                         :11.35
                                                 Mean
                                                      :11.33
## 3rd Qu.:10.00
                   3rd Qu.:10.00
                                                 3rd Qu.:10.00
## Max. :99.00
                   Max.
                          :99.00
                                                 Max.
                                                        :99.00
                          :33744
                                                        :33744
## NA's
         :33744
                   NA's
                                                 NA's
## Variety.of.parking.options.eg.garage.surface.lot.valet.reserved.parking.etc
## Min. : 1.00
## 1st Qu.: 6.00
## Median: 8.00
## Mean :12.89
## 3rd Qu.: 9.50
## Max. :99.00
          :33744
## Cleanliness.of.the.parking.facilities Clarity.of.signsdirections
## Min. : 1.00
                                       Min.
                                            : 1.00
## 1st Qu.: 7.00
                                       1st Qu.: 7.00
## Median: 8.00
                                       Median: 8.00
## Mean :11.84
                                       Mean :10.89
## 3rd Qu.:10.00
                                       3rd Qu.: 9.00
## Max. :99.00
                                              :99.00
                                       Max.
## NA's
         :33744
                                       NA's
                                              :33744
## Convenience.to.terminal Reasonableness.of.the.price
## Min. : 1.0
                          Min. : 1.00
## 1st Qu.: 7.0
                          1st Qu.: 6.00
## Median: 8.0
                          Median: 8.00
## Mean :10.9
                          Mean :10.74
                          3rd Qu.: 9.00
## 3rd Qu.:10.0
## Max. :99.0
                          Max.
                                :99.00
## NA's
         :33744
                          NA's
                               :33744
## Overall.parking.experience Easy.to.find.loadingunloading.area
## Min. : 1.00
                             Min. : 0.000
## 1st Qu.: 7.00
                             1st Qu.: 1.000
                             Median : 1.000
## Median: 8.00
## Mean : 7.89
                             Mean : 6.083
## 3rd Qu.: 9.00
                             3rd Qu.: 1.000
                                   :99.000
## Max. :10.00
                             Max.
## NA's
         :33744
                             NA's
                                   :22464
## Easy.to.find.transportation.service.to.Evaluated.Airport
## Min. :1.00
## 1st Qu.:3.00
## Median :4.00
```

```
## Mean :3.37
## 3rd Qu.:4.00
## Max.
        :4.00
## NA's
          :33428
## Ease.of.dropping.off Safety.and.security.1 Clarity.of.signsdirections.1
## Min. : 1.000
                      Min. : 1.000
                                           Min. : 1.000
                                           1st Qu.: 7.000
## 1st Qu.: 7.000
                       1st Qu.: 7.000
## Median : 9.000
                      Median : 9.000
                                           Median: 8.000
## Mean : 8.742
                      Mean : 9.092
                                           Mean : 9.139
## 3rd Qu.:10.000
                       3rd Qu.:10.000
                                           3rd Qu.:10.000
## Max. :99.000
                       Max. :99.000
                                           Max. :99.000
## NA's
        :22464
                       NA's
                            :22464
                                           NA's
                                                :22464
## Convenience.to.terminal.1 Overall.drop.off.experience
## Min. : 1.00
                           Min. : 1.00
## 1st Qu.: 7.00
                           1st Qu.: 7.00
## Median: 9.00
                           Median: 9.00
## Mean : 8.68
                           Mean : 8.19
## 3rd Qu.:10.00
                           3rd Qu.:10.00
## Max. :99.00
                           Max.
                                  :10.00
## NA's
        :22464
                           NA's
                                  :22464
## Rental.car.facility.signage Shuttle.needed Who.operated.shuttle
## Min. : 0.00
                            Min. :0.00
                                            Min. : 1.00
## 1st Qu.: 1.00
                             1st Qu.:0.00
                                            1st Qu.: 1.00
## Median: 1.00
                             Median:1.00
                                            Median: 1.00
## Mean : 4.28
                            Mean :0.62 Mean :10.21
## 3rd Qu.: 1.00
                             3rd Qu.:1.00
                                            3rd Qu.: 2.00
## Max. :99.00
                             Max. :1.00
                                            Max.
                                                  :99.00
         :35628
                             NA's
                                    :35628
                                            NA's
                                                   :37366
## Wait.time.for.shuttle.to.Evaluated.Airport
## Min. : 0.0
## 1st Qu.: 3.0
## Median: 5.0
## Mean :147.8
## 3rd Qu.: 15.0
## Max. :999.0
## NA's
         :37366
## Minutes.to.terminal.after.boarding.shuttle Ease.of.entrance.1
## Min. : 0.0
                                           Min. : 1.00
## 1st Qu.: 5.0
                                           1st Qu.: 7.00
## Median: 10.0
                                           Median: 9.00
## Mean :165.8
                                           Mean : 8.62
## 3rd Qu.: 15.0
                                           3rd Qu.:10.00
## Max. :999.0
                                           Max. :99.00
## NA's :37366
                                           NA's
                                                  :35628
## Safety.and.security.2 Cleanliness.of.the.rental.car.facilities
## Min. : 1.00
                        Min. : 1.00
## 1st Qu.: 7.00
                        1st Qu.: 7.00
## Median : 9.00
                       Median: 9.00
## Mean : 9.39
                        Mean : 9.06
## 3rd Qu.:10.00
                        3rd Qu.:10.00
## Max. :99.00
                        Max.
                             :99.00
## NA's :35628
                       NA's
                              :35628
## Clarity.of.signsdirections.2 Convenience.to.terminal.2
## Min. : 1.00
                              Min. : 1.00
```

```
## 1st Qu.: 7.00
                              1st Qu.: 7.00
## Median: 8.00
                              Median: 8.00
## Mean : 8.61
                              Mean : 8.41
## 3rd Qu.:10.00
                              3rd Qu.:10.00
## Max.
        :99.00
                              Max.
                                     :99.00
## NA's
        :35628
                              NA's
                                     :35628
## Overall.rental.car.facility.experience
## Min. : 1.00
## 1st Qu.: 7.00
## Median: 9.00
## Mean : 8.11
## 3rd Qu.:10.00
## Max. :10.00
## NA's
        :35628
## How.often.public.transportation.used.1
## Min. : 1.00
## 1st Qu.: 2.00
## Median: 3.00
## Mean : 5.78
## 3rd Qu.: 4.00
## Max. :99.00
## NA's :38420
## Frequency.of.public.transportation.service Safety.and.security.3
## Min. : 1.00
                                           Min. : 1.00
## 1st Qu.: 7.00
                                           1st Qu.: 7.00
## Median: 8.00
                                           Median: 8.00
## Mean : 9.06
                                           Mean : 8.88
## 3rd Qu.:10.00
                                           3rd Qu.: 9.50
## Max. :99.00
                                           Max. :99.00
## NA's :38420
                                           NA's :38420
## Cleanliness.of.the.public.transportation.facilities
## Min. : 1.00
## 1st Qu.: 7.00
## Median: 8.00
## Mean : 9.18
## 3rd Qu.: 9.00
## Max. :99.00
## NA's :38420
## Clarity.of.signsdirections.3 Convenience.to.terminal.3
## Min. : 1.00
                              Min. : 1.00
## 1st Qu.: 7.00
                              1st Qu.: 7.00
## Median: 8.00
                              Median: 9.00
## Mean : 9.57
                              Mean : 9.16
## 3rd Qu.:10.00
                              3rd Qu.:10.00
## Max.
         :99.00
                              Max.
                                    :99.00
## NA's :38420
                              NA's
                                     :38420
## Overall.public.transportation.experience
## Min. : 1.0
## 1st Qu.: 7.0
## Median: 8.0
## Mean : 8.1
## 3rd Qu.: 9.0
## Max. :10.0
## NA's :38420
```

```
## Transportation.method.used.to.leave.Evaluated.Airport
## Min. : 1.000
## 1st Qu.: 2.000
## Median: 3.000
## Mean : 6.472
## 3rd Qu.: 5.000
## Max. :97.000
## NA's :8694
## Time.left.Evaluated.Airport Time.left.Evaluated.Airport.AMPM
## Min. : 1.00
                             Min. : 1.00
## 1st Qu.: 5.00
                              1st Qu.: 2.00
## Median: 8.00
                              Median: 2.00
## Mean :23.57
                             Mean :19.59
## 3rd Qu.:11.00
                              3rd Qu.: 2.00
## Max.
          :95.00
                              Max.
                                    :95.00
## NA's
          :8694
                              NA's
                                    :8694
## Miles.traveled.from.Evaluated.Airport
## Min. : 0.0
## 1st Qu.: 12.0
## Median : 25.0
## Mean :167.3
## 3rd Qu.: 62.0
## Max. :999.0
## NA's
          :8694
## Minutes.to.travel.from.Evaluated.Airport.to.destination
## Min. : 0.0
## 1st Qu.: 22.0
## Median: 40.0
## Mean
         :220.8
## 3rd Qu.:110.0
## Max.
         :999.0
## NA's
          :8694
## Traffic.congestion.leaving.complex Preferred.transportation.mode
## Min. : 1.000
                                    Min. : 1.00
## 1st Qu.: 2.000
                                    1st Qu.: 2.00
## Median: 3.000
                                    Median: 3.00
## Mean : 6.907
                                    Mean :12.68
## 3rd Qu.: 4.000
                                    3rd Qu.: 4.00
## Max.
        :99.000
                                    Max.
                                          :97.00
         :8694
## NA's
                                    NA's
                                          :8694
## Clarity.of.signs..directions Convenience.of.transportation
## Min. : 1.000
                              Min. : 1.00
## 1st Qu.: 7.000
                               1st Qu.: 7.00
## Median: 8.000
                               Median: 8.00
## Mean : 8.925
                               Mean :10.77
## 3rd Qu.: 9.000
                               3rd Qu.: 9.00
## Max. :99.000
                                    :99.00
                               Max.
## NA's
         :8694
                               NA's
                                    :8694
## Attractiveness.of.airport.grounds Ease.of.arriving.at.the.terminal
## Min. : 1.000
                                   Min. : 1.000
## 1st Qu.: 6.000
                                   1st Qu.: 7.000
## Median: 8.000
                                   Median: 8.000
                                   Mean : 8.713
## Mean : 8.954
## 3rd Qu.: 9.000
                                   3rd Qu.: 9.000
```

```
:99.000
## Max.
                                    Max.
                                          :99.000
## NA's
          :8694
                                    NA's
                                          :8694
## Ease.of.leaving.terminal Traffic.flow.on.airport.grounds
                                 : 1.000
         : 1.000
                           Min.
                           1st Qu.: 6.000
## 1st Qu.: 7.000
## Median : 8.000
                           Median : 8.000
## Mean : 8.819
                           Mean : 8.975
## 3rd Qu.: 9.000
                           3rd Qu.: 9.000
## Max.
          :99.000
                           Max.
                                  :99.000
          :8694
## NA's
                           NA's
                                  :8694
## Overall.airport.accessibility.experience Place.of.checkin
## Min. : 1.000
                                          Min. :1.000
## 1st Qu.: 7.000
                                          1st Qu.:2.000
## Median: 8.000
                                          Median :3.000
## Mean : 7.908
                                          Mean :2.889
## 3rd Qu.: 9.000
                                          3rd Qu.:4.000
## Max. :10.000
                                          Max.
                                                 :4.000
         :8694
## NA's
                                          NA's
                                                 :8694
## Number.of.bags.checked.in
## Min. : 0.000
## 1st Qu.: 1.000
## Median: 1.000
## Mean : 1.208
## 3rd Qu.: 2.000
## Max. :20.000
         :8694
## Easy.to.find.luggage.trolleys.when.entered.terminal
## Min. : 0.00
## 1st Qu.: 1.00
## Median: 1.00
## Mean :35.81
## 3rd Qu.:99.00
## Max.
         :99.00
## NA's
          :8694
## Place.for.luggage.checkin Airlineairport.responsible.for.handling.luggage
## Min.
         :1.000
                            Min.
                                 :1.00
## 1st Qu.:2.000
                            1st Qu.:1.00
## Median :2.000
                            Median:2.00
## Mean :1.805
                            Mean
                                  :2.06
## 3rd Qu.:2.000
                            3rd Qu.:3.00
## Max.
         :2.000
                            Max.
                                 :3.00
## NA's
         :16186
                            NA's
                                   :8694
## Minutes.to.obtain.boarding.pass
## Min. : 0.00
## 1st Qu.: 5.00
## Median : 10.00
## Mean : 13.51
## 3rd Qu.: 15.00
## Max. :180.00
## NA's
         :13252
## Ease.of.finding.checkinbaggage.check.location
## Min. : 1.0
## 1st Qu.: 7.0
## Median: 9.0
```

```
## Mean :16.6
## 3rd Qu.:10.0
## Max.
        :99.0
## NA's
          :8694
## Traffic.flow.at.checkinbaggage.check.area
## Min. : 1.00
## 1st Qu.: 7.00
## Median: 8.00
## Mean :16.32
## 3rd Qu.:10.00
## Max. :99.00
## NA's
          :8694
## Cleanliness.of.the.checkinbaggage.check.area
## Min. : 1.00
## 1st Qu.: 7.00
## Median: 9.00
## Mean :16.49
## 3rd Qu.:10.00
## Max. :99.00
## NA's :8694
## Overall.checkinbaggage.check.experience Type.of.security.line
## Min. : 1.000
                                        Min. : 1.00
## 1st Qu.: 7.000
                                         1st Qu.: 1.00
## Median: 8.000
                                        Median: 3.00
## Mean : 7.976
                                        Mean : 3.13
## 3rd Qu.: 9.000
                                         3rd Qu.: 3.00
## Max. :10.000
                                        Max. :97.00
          :8694
                                               :8694
## Lines.available..Number.of.security.lines.available
## Min. : 1.000
## 1st Qu.: 2.000
## Median : 3.000
## Mean : 3.879
## 3rd Qu.: 5.000
## Max. :100.000
## NA's
          :8694
## Lines.open..Number.of.security.lines.available
## Min. : 1.000
## 1st Qu.: 2.000
## Median : 2.000
## Mean : 3.017
## 3rd Qu.: 4.000
## Max. :100.000
## NA's :8694
## Sign.to.inform.security.wait.times Singled.out.for.special.TSA.screening
## Min. : 0.00
                                    Min. : 0.000
## 1st Qu.: 0.00
                                    1st Qu.: 0.000
## Median : 1.00
                                    Median : 0.000
## Mean :31.03
                                    Mean : 3.964
## 3rd Qu.:99.00
                                    3rd Qu.: 0.000
## Max. :99.00
                                    Max. :99.000
## NA's :8694
                                    NA's
                                          :10888
## Minutes.between.cleared.security.and.boarding.the.plane
## Min. : 0.0
```

```
## 1st Qu.: 35.0
## Median: 60.0
## Mean
         :219.8
## 3rd Qu.:100.0
## Max.
          :999.0
## NA's
          :8694
## Foodbeverages.purchased.beforeafter.security Healthy.foodbeverage.options
          :1.000
                                               Min. : 0.00
## Min.
## 1st Qu.:2.000
                                                1st Qu.: 1.00
## Median :2.000
                                               Median: 1.00
## Mean
         :1.956
                                               Mean
                                                     :19.95
## 3rd Qu.:2.000
                                               3rd Qu.: 1.00
                                                      :99.00
## Max.
          :3.000
                                               Max.
## NA's
          :24296
                                               NA's
                                                      :35094
## Importance.of.healthy.foodbeverage.options
## Min.
          :1.00
## 1st Qu.:3.00
## Median :3.00
## Mean
         :3.02
## 3rd Qu.:4.00
## Max.
         :4.00
## NA's
          :35094
## Were.local.restaurant.or.food.choices.ie.nonchain.restaurants.available.at.Airport.Evaluated
## Min. : 0.00
## 1st Qu.: 1.00
## Median: 1.00
## Mean :19.68
## 3rd Qu.: 1.00
## Max.
          :99.00
## NA's
          :28131
## Foodbeverages.wanted.found
                                Not.hungry
                                             Brought.my.own.food
          : 0.000
                              Min.
                                     :0.000
                                             Min. :0.000
## 1st Qu.: 1.000
                              1st Qu.:0.000
                                             1st Qu.:0.000
## Median : 1.000
                              Median :1.000
                                             Median :0.000
## Mean : 3.087
                                    :0.553
                              Mean
                                             Mean :0.184
## 3rd Qu.: 1.000
                              3rd Qu.:1.000
                                             3rd Qu.:0.000
          :99.000
## Max.
                              Max.
                                    :1.000
                                             Max.
                                                    :1.000
## NA's
          :28131
                              NA's
                                     :24581
                                             NA's
                                                    :24581
## Didnt.like.the.choices Too.expensive
                                             No.time
                                                            Other.1
                                :0.000
## Min.
          :0.000
                          Min.
                                         Min.
                                                :0.000
                                                         Min.
                                                                :0.000
## 1st Qu.:0.000
                          1st Qu.:0.000
                                         1st Qu.:0.000
                                                         1st Qu.:0.000
                          Median :0.000
## Median :0.000
                                         Median :0.000
                                                         Median :0.000
## Mean :0.074
                                :0.271
                                         Mean
                                               :0.126
                                                         Mean
                                                                :0.053
                          Mean
## 3rd Qu.:0.000
                          3rd Qu.:1.000
                                         3rd Qu.:0.000
                                                         3rd Qu.:0.000
## Max.
          :1.000
                          Max.
                                 :1.000
                                         Max.
                                                :1.000
                                                         Max.
                                                                :1.000
## NA's
                          NA's
                                 :24581
                                         NA's
                                                 :24581
                                                         NA's
          :24581
                                                                :24581
## Shopped.at.retail.stores.beforeafter.security Didnt.have.time
## Min. :1.000
                                                Min.
                                                       :0.000
## 1st Qu.:2.000
                                                1st Qu.:0.000
## Median :2.000
                                                Median :0.000
## Mean
          :1.899
                                                Mean
                                                       :0.089
## 3rd Qu.:2.000
                                                3rd Qu.:0.000
## Max.
          :3.000
                                                Max.
                                                       :1.000
## NA's
                                                NA's :17465
          :31412
```

```
Too.expensive.1 Didnt.have.what.I.need No.need.to.shop
                                                                Other.2
##
    Min.
           :0.00
                    Min.
                           :0.000
                                            Min.
                                                   :0.00
                                                            Min.
                                                                    :0.000
                    1st Qu.:0.000
                                            1st Qu.:1.00
##
    1st Qu.:0.00
                                                             1st Qu.:0.000
  Median:0.00
                    Median :0.000
                                            Median:1.00
                                                            Median :0.000
##
##
    Mean
          :0.26
                    Mean
                           :0.044
                                            Mean
                                                  :0.78
                                                            Mean
                                                                    :0.019
##
    3rd Qu.:1.00
                    3rd Qu.:0.000
                                            3rd Qu.:1.00
                                                            3rd Qu.:0.000
##
    Max.
           :1.00
                    Max.
                           :1.000
                                                            Max.
                                            Max.
                                                   :1.00
                                                                   :1.000
                           :17465
                                                   :17465
                                                                    :17465
##
    NA's
           :17465
                    NA's
                                            NA's
                                                            NA's
    Arriving.on.the.airport.grounds
                                        Checkin
                                                        Security
                                                            :0.00
##
           :0.00
                                            :0.00
   Min.
                                     Min.
                                                     Min.
    1st Qu.:0.00
                                     1st Qu.:0.00
                                                     1st Qu.:0.00
  Median:0.00
                                     Median:0.00
                                                     Median:0.00
##
    Mean
           :0.29
                                     Mean
                                            :0.33
                                                     Mean
                                                            :0.29
                                                     3rd Qu.:1.00
##
    3rd Qu.:1.00
                                     3rd Qu.:1.00
##
    Max.
           :1.00
                                     Max.
                                            :1.00
                                                             :1.00
                                                     Max.
##
    NA's
           :38888
                                     NA's
                                            :38888
                                                     NA's
                                                             :38888
##
      Gate.area
                    Baggage.claim.area
##
    Min.
           :0.00
                    Min.
                          :0.00
##
    1st Qu.:0.00
                    1st Qu.:0.00
##
    Median:0.00
                    Median:0.00
##
    Mean
           :0.37
                    Mean
                           :0.28
##
    3rd Qu.:1.00
                    3rd Qu.:1.00
  Max.
##
           :1.00
                    Max.
                           :1.00
##
    NA's
           :38888
                    NA's
                           :38888
##
    Ground.transportation.eg.taxi.shuttle.etc
                                                 Restrooms
    Min.
           :0.00
                                               Min.
                                                      :0.00
##
   1st Qu.:0.00
                                               1st Qu.:0.00
    Median:0.00
                                               Median:0.00
                                                      :0.23
##
   Mean
           :0.28
                                               Mean
   3rd Qu.:1.00
                                               3rd Qu.:0.00
##
    Max.
           :1.00
                                               Max.
                                                      :1.00
##
    NA's
           :38888
                                               NA's
                                                      :38888
##
    Food.and.beverage Retail.shops
##
           :0.00
   Min.
                      Min.
                            :0.00
##
    1st Qu.:0.00
                      1st Qu.:0.00
##
    Median:0.00
                      Median:0.00
##
    Mean
          :0.13
                      Mean :0.07
##
    3rd Qu.:0.00
                      3rd Qu.:0.00
##
    Max.
           :1.00
                      Max.
                              :1.00
##
    NA's
           :38888
                      NA's
                              :38888
    Flight.monitors.eg.arrivaldeparture.info Parking.structures
##
   Min.
           :0.00
                                              Min.
                                                     :0.00
    1st Qu.:0.00
                                              1st Qu.:0.00
##
   Median:0.00
                                              Median:0.00
    Mean
           :0.25
                                                     :0.18
                                              Mean
    3rd Qu.:0.00
##
                                              3rd Qu.:0.00
##
    Max.
           :1.00
                                              Max.
                                                     :1.00
##
    NA's
           :38888
                                              NA's
                                                     :38888
##
       Other.3
                    Used.restrooms.in.terminal WiFi.connection.offered
                                                Min. : 0.00
##
   Min.
           :0.00
                    Min. :0.00
##
   1st Qu.:0.00
                    1st Qu.:0.00
                                                1st Qu.: 1.00
##
  Median:0.00
                                                Median: 1.00
                    Median:1.00
## Mean :0.06
                    Mean :0.73
                                                Mean :30.61
## 3rd Qu.:0.00
                                                3rd Qu.:99.00
                    3rd Qu.:1.00
```

```
:1.00
                                           Max. :99.00
## Max.
        :1.00
                  Max.
## NA's
         :38888 NA's :8694
                                           NA's :8694
## WiFi.connection.speed Noise.level.at.the.airport Utilized.airport.lounge
                       Min. : 1.000
## Min. : 0.000
                                                 Min. :0.000
                        1st Qu.: 2.000
   1st Qu.: 1.000
                                                 1st Qu.:0.000
## Median : 2.000
                       Median : 2.000
                                                 Median :0.000
## Mean : 2.636
                       Mean : 4.205
                                                 Mean :0.164
## 3rd Qu.: 2.000
                        3rd Qu.: 2.000
                                                 3rd Qu.:0.000
## Max. :99.000
                        Max.
                             :99.000
                                                 Max.
                                                       :1.000
## NA's
         :20212
                       NA's
                              :8694
                                                 NA's
                                                        :8694
## Air.temperature.at.the.gate Wheelchair.servicecourtesy.cart
## Min. :1.000
                             Min. :0.000
## 1st Qu.:2.000
                             1st Qu.:0.000
## Median :2.000
                             Median : 0.000
## Mean :1.958
                             Mean
                                   :0.077
## 3rd Qu.:2.000
                             3rd Qu.:0.000
## Max. :3.000
                             Max.
                                    :1.000
## NA's
        :8694
                             NA's
                                    :8694
## Plane.not.there Mechanical.problems Bad.weather.where.you.were
## Min. :0.00
                Min. :0.00
                                     Min. :0.00
## 1st Qu.:0.00
                  1st Qu.:0.00
                                     1st Qu.:0.00
## Median :0.00
                  Median:0.00
                                     Median:0.00
## Mean :0.17
                  Mean :0.12
                                     Mean :0.11
##
   3rd Qu.:0.00
                  3rd Qu.:0.00
                                     3rd Qu.:0.00
## Max. :1.00
                  Max. :1.00
                                     Max. :1.00
## NA's :36312 NA's :36312
                                     NA's
## Bad.weather.where.you.were.going Crew.not.there
## Min. :0.0
                                  Min. :0.00
## 1st Qu.:0.0
                                  1st Qu.:0.00
## Median :0.0
                                  Median:0.00
## Mean :0.1
                                  Mean :0.06
## 3rd Qu.:0.0
                                  3rd Qu.:0.00
## Max. :1.0
                                       :1.00
                                  Max.
## NA's :36312
                                  NA's
                                        :36312
## Gate.not.available.at.destination Delay.in.landing Flight.overbooked
                                                   Min. :0.00
## Min. :0.00
                                   Min. :0.00
## 1st Qu.:0.00
                                   1st Qu.:0.00
                                                   1st Qu.:0.00
## Median :0.00
                                   Median:0.00
                                                   Median:0.00
## Mean :0.02
                                   Mean :0.11
                                                   Mean :0.04
## 3rd Qu.:0.00
                                                   3rd Qu.:0.00
                                   3rd Qu.:0.00
## Max. :1.00
                                  Max. :1.00
                                                   Max. :1.00
## NA's :36312
                                  NA's
                                         :36312
                                                  NA's
                                                         :36312
## Too.much.carryon.baggage Security.issue Passengers.late.arrivalsslow
## Min. :0.00
                          Min. :0.00
                                         Min.
                                                :0.00
## 1st Qu.:0.00
                          1st Qu.:0.00
                                         1st Qu.:0.00
## Median :0.00
                          Median :0.00
                                         Median:0.00
                          Mean :0.01
## Mean :0.03
                                         Mean :0.05
## 3rd Qu.:0.00
                          3rd Qu.:0.00
                                         3rd Qu.:0.00
## Max. :1.00
                          Max.
                                 :1.00
                                         Max.
                                                :1.00
                                 :36312
## NA's
                                         NA's
         :36312
                          NA's
                                                :36312
## Runway.trafficAir.traffic.control
                                      Other.4
## Min.
                                         :0.00
        :0.00
                                   Min.
## 1st Qu.:0.00
                                   1st Qu.:0.00
## Median :0.00
                                   Median:0.00
```

```
## Mean
          :0.09
                                   Mean :0.05
## 3rd Qu.:0.00
                                   3rd Qu.:0.00
         :1.00
                                   Max. :1.00
## Max.
## NA's
         :36312
                                   NA's :36312
## I.dont.know.the.cause.of.the.delay
## Min.
         :0.00
## 1st Qu.:0.00
## Median :0.00
## Mean :0.26
## 3rd Qu.:1.00
## Max.
         :1.00
## NA's
         :36312
## How.many.minutes.was.your.flight.delayed Obtained.checked.baggage
## Min.
        : 0
                                          Min.
                                                :0.000
## 1st Qu.: 25
                                          1st Qu.:0.000
## Median: 45
                                          Median :1.000
## Mean :173
                                          Mean :0.602
## 3rd Qu.:120
                                          3rd Qu.:1.000
## Max.
         :999
                                          Max.
                                                :1.000
## NA's
         :36312
                                          NA's
                                                :8694
## Minutes.to.get.to.the.baggage.claim.area
## Min. : 0.0
## 1st Qu.: 5.0
## Median: 10.0
## Mean :156.1
## 3rd Qu.: 20.0
## Max.
         :999.0
         :21212
## Minutes.waited.at.the.baggage.claim.area All.baggage.received
## Min. : 0
                                          Min.
                                                : 0.000
## 1st Qu.: 7
                                          1st Qu.: 1.000
## Median : 15
                                          Median : 1.000
## Mean :154
                                          Mean : 2.328
## 3rd Qu.: 20
                                          3rd Qu.: 1.000
## Max. :999
                                          Max. :99.000
## NA's
          :21212
                                          NA's
                                                :21212
## Easy.to.find.luggage.trolleys.in.baggage.claim.area
## Min. : 0.00
## 1st Qu.: 1.00
## Median: 1.00
## Mean :24.89
## 3rd Qu.: 1.00
## Max. :99.00
## NA's :21212
## Ease.of.finding.your.baggage.claim.areacarousel
        : 1.000
## Min.
## 1st Qu.: 7.000
## Median: 8.000
## Mean : 8.277
## 3rd Qu.:10.000
## Max. :99.000
## NA's :21212
## Physical.conditioncleanliness.of.baggage.claim.area
## Min. : 1.000
```

```
## 1st Qu.: 7.000
## Median: 8.000
## Mean : 8.139
## 3rd Qu.: 9.000
## Max.
         :99.000
## NA's
          :21212
## Speed.of.baggage.delivery Overall.baggage.claim.experience
## Min. : 1.000
                            Min. : 1.000
                            1st Qu.: 7.000
## 1st Qu.: 6.000
## Median : 8.000
                            Median : 8.000
## Mean : 7.662
                            Mean
                                 : 7.761
## 3rd Qu.: 9.000
                            3rd Qu.: 9.000
## Max.
        :99.000
                            Max.
                                  :10.000
## NA's
         :21212
                            NA's
                                   :21212
## Went.through.immigrationcustoms Used.kiosk
## Min.
          :0.000
                                 Min. : 0.00
## 1st Qu.:0.000
                                 1st Qu.: 0.00
## Median :0.000
                                 Median: 1.00
## Mean :0.159
                                 Mean : 5.48
## 3rd Qu.:0.000
                                  3rd Qu.: 1.00
## Max. :1.000
                                 Max.
                                       :99.00
## NA's
          :8694
                                 NA's
                                        :35174
## Minutes.to.get.through.immigrationcustoms
## Min. : 0.0
## 1st Qu.: 8.0
## Median: 15.0
## Mean :219.1
## 3rd Qu.: 45.0
## Max.
        :999.0
## NA's :35174
## Overall.immigrationcustoms.experience Likelihood.to.use.airport
## Min. : 1.00
                                       Min.
                                              : 1.00
## 1st Qu.: 7.00
                                       1st Qu.: 3.00
## Median: 8.00
                                       Median: 4.00
## Mean : 7.66
                                             : 5.99
                                       Mean
## 3rd Qu.: 9.00
                                       3rd Qu.: 4.00
                                              :99.00
## Max. :10.00
                                       Max.
## NA's :35174
                                       NA's
                                             :8694
## Likelihood.to.recommend Number.of.positive.recommendations
                          Min. : 0.00
## Min. : 1.00
## 1st Qu.: 3.00
                          1st Qu.: 1.00
## Median: 4.00
                          Median: 3.00
## Mean : 7.55
                          Mean :38.54
## 3rd Qu.: 4.00
                          3rd Qu.:99.00
## Max.
         :99.00
                          Max.
                                 :99.00
## NA's
                          NA's
                                 :8694
          :8694
## Number.of.negative.comments Posted.comments.on.social.media
## Min. : 0.00
                              Min.
                                    :0.000
## 1st Qu.: 0.00
                              1st Qu.:0.000
## Median: 0.00
                              Median :0.000
## Mean
          :29.52
                              Mean :0.095
## 3rd Qu.:99.00
                              3rd Qu.:0.000
## Max. :99.00
                             Max.
                                    :1.000
## NA's
          :8694
                              NA's
                                    :8694
```

```
##
         Yelp
                       Facebook
                                       Twitter
                                                       Instagram
                           :0.00
                                                            :0.00
##
   Min.
           :0.00
                    Min.
                                           :0.00
                                                     Min.
                                    Min.
   1st Qu.:0.00
                    1st Qu.:0.00
                                    1st Qu.:0.00
                                                     1st Qu.:0.00
                                                     Median:0.00
##
   Median:0.00
                    Median:1.00
                                    Median:0.00
##
   Mean
         :0.14
                    Mean
                           :0.71
                                    Mean
                                          :0.31
                                                     Mean
                                                           :0.36
##
   3rd Qu.:0.00
                    3rd Qu.:1.00
                                    3rd Qu.:1.00
                                                     3rd Qu.:1.00
                    Max.
   Max.
           :1.00
                           :1.00
                                    Max.
                                           :1.00
                                                     Max.
                                                           :1.00
   NA's
                    NA's
                                    NA's
                                                     NA's
##
           :37182
                           :37182
                                           :37182
                                                           :37182
##
        Tumblr
                       YouTube
                                       LinkedIn
                                                      Trip.Advisor
##
   Min.
           :0.00
                    Min.
                           :0.00
                                    Min.
                                           :0.00
                                                     Min.
                                                          :0.00
   1st Qu.:0.00
                    1st Qu.:0.00
                                    1st Qu.:0.00
                                                     1st Qu.:0.00
##
  Median:0.00
                    Median:0.00
                                    Median:0.00
                                                     Median:0.00
##
   Mean
          :0.12
                    Mean
                           :0.29
                                    Mean
                                          :0.15
                                                     Mean
                                                           :0.21
   3rd Qu.:0.00
                    3rd Qu.:1.00
##
                                    3rd Qu.:0.00
                                                     3rd Qu.:0.00
##
   Max.
           :1.00
                    Max.
                           :1.00
                                    Max.
                                            :1.00
                                                     Max.
                                                            :1.00
##
   NA's
           :37182
                    NA's
                           :37182
                                    NA's
                                            :37182
                                                     NA's
                                                            :37182
##
      Other.blog
                     Other.forum
                                    Other.ratingreview.sites
                                                                 Other.5
                                                                    :0.00
##
   Min.
           :0.00
                    Min.
                           :0.00
                                    Min.
                                            :0.00
                                                              Min.
                    1st Qu.:0.00
   1st Qu.:0.00
##
                                    1st Qu.:0.00
                                                              1st Qu.:0.00
##
   Median:0.00
                    Median:0.00
                                    Median:0.00
                                                              Median:0.00
                           :0.06
##
   Mean
          :0.06
                    Mean
                                    Mean
                                          :0.06
                                                              Mean
                                                                    :0.01
##
   3rd Qu.:0.00
                    3rd Qu.:0.00
                                    3rd Qu.:0.00
                                                              3rd Qu.:0.00
##
  Max.
           :1.00
                    Max.
                           :1.00
                                    Max.
                                           :1.00
                                                              Max.
                                                                     :1.00
   NA's
           :37182
                    NA's
                           :37182
                                    NA's
                                            :37182
                                                              NA's
##
                                                                     :37182
##
   Dont.knowdont.remember Number.times.read.online.travel.information
   Min.
           :0.00
                           Min.
                                  :
                                      0
##
   1st Qu.:0.00
                           1st Qu.:
   Median:0.00
                           Median :
                                      2
##
   Mean
          :0.02
                                  :3200
                           Mean
   3rd Qu.:0.00
                           3rd Qu.:9999
##
   Max.
           :1.00
                           Max.
                                  :9999
##
   NA's
           :37182
                           NA's
                                  :8694
##
   Wireless.Internet Plug.for.your.computer.phone.etc Arcadegame.room
                                                        Min. :0.000
           :0.000
                      Min. :0.000
##
   1st Qu.:0.000
                      1st Qu.:0.000
                                                        1st Qu.:0.000
##
   Median :0.000
                      Median : 0.000
                                                        Median : 0.000
##
   Mean :0.494
                      Mean :0.483
                                                        Mean
                                                             :0.105
##
   3rd Qu.:1.000
                      3rd Qu.:1.000
                                                        3rd Qu.:0.000
##
   Max.
           :1.000
                      Max.
                             :1.000
                                                        Max.
                                                               :1.000
##
   NA's
           :8694
                      NA's
                             :8694
                                                               :8694
                                                        NA's
   Personal.services.eg.massage.hair.salon.shoe.shine.etc
##
  Min.
           :0.000
   1st Qu.:0.000
##
  Median :0.000
   Mean
          :0.103
##
   3rd Qu.:0.000
##
   Max.
           :1.000
##
   NA's
           :8694
   More.variety.of.food.andor.beverage More.variety.of.retail.services
##
   Min.
          :0.000
                                        Min. :0.000
##
  1st Qu.:0.000
                                         1st Qu.:0.000
## Median :0.000
                                        Median : 0.000
## Mean :0.343
                                        Mean :0.153
                                        3rd Qu.:0.000
## 3rd Qu.:1.000
```

```
Max.
           :1.000
                                          Max.
                                                  :1.000
##
    NA's
           :8694
                                          NA's
                                                  :8694
     Premier.club
                     Childrens.play.area Smoking.arealounge
##
##
    Min.
           :0.000
                     Min.
                            :0.000
                                          Min.
                                                  :0.0
##
    1st Qu.:0.000
                     1st Qu.:0.000
                                          1st Qu.:0.0
##
    Median : 0.000
                     Median : 0.000
                                          Median:0.0
    Mean
           :0.079
                     Mean :0.093
                                          Mean :0.1
    3rd Qu.:0.000
                                          3rd Qu.:0.0
##
                     3rd Qu.:0.000
##
    Max.
           :1.000
                     Max.
                             :1.000
                                          Max.
                                                  :1.0
##
    NA's
                                                  :8694
           :8694
                     NA's
                             :8694
                                          NA's
    More.comfortable.seating.area
                                      Quiet.area
                                                     Work.space.near.plug
    Min.
##
                                           :0.000
                                                            :0.000
           :0.000
                                    Min.
                                                     Min.
##
    1st Qu.:0.000
                                    1st Qu.:0.000
                                                     1st Qu.:0.000
##
    Median : 0.000
                                    Median : 0.000
                                                     Median : 0.000
##
    Mean
           :0.421
                                           :0.316
                                                     Mean
                                                             :0.233
                                    Mean
##
    3rd Qu.:1.000
                                    3rd Qu.:1.000
                                                     3rd Qu.:0.000
##
           :1.000
    Max.
                                    Max.
                                           :1.000
                                                     Max.
                                                             :1.000
##
    NA's
           :8694
                                    NA's
                                            :8694
                                                     NA's
                                                             :8694
##
         ATM
                                      Religious.facilities
                     Movie.theater
##
    Min.
           :0.000
                     Min.
                            :0.000
                                      Min.
                                            :0.000
                     1st Qu.:0.000
##
    1st Qu.:0.000
                                      1st Qu.:0.000
    Median : 0.000
                     Median : 0.000
                                      Median : 0.000
##
    Mean
           :0.141
                            :0.096
                                      Mean
                                            :0.035
                     Mean
    3rd Qu.:0.000
                     3rd Qu.:0.000
                                      3rd Qu.:0.000
##
##
    Max.
           :1.000
                     Max.
                            :1.000
                                      Max.
                                            :1.000
           :8694
                     NA's
                            :8694
                                      NA's
                                              :8694
##
    ExerciseHealth.club.facilities
                                           TV
                                                         Other.6
                                            :0.000
    Min.
           :0.000
                                     Min.
                                                      Min.
                                                              :0.000
##
    1st Qu.:0.000
                                     1st Qu.:0.000
                                                      1st Qu.:0.000
    Median : 0.000
                                     Median :0.000
                                                      Median : 0.000
##
    Mean
          :0.077
                                     Mean
                                            :0.343
                                                      Mean
                                                              :0.014
##
    3rd Qu.:0.000
                                     3rd Qu.:1.000
                                                      3rd Qu.:0.000
##
    Max.
           :1.000
                                     Max.
                                             :1.000
                                                      Max.
                                                              :1.000
##
    NA's
           :8694
                                     NA's
                                             :8694
                                                              :8694
                                                      NA's
##
        None.1
                         Gender
                                          Country
                                                           Birth.Year
                                              : 1.000
##
           :0.000
                            : 0.000
    Min.
                     Min.
                                       Min.
                                                         Min.
                                                               : 98
##
    1st Qu.:0.000
                     1st Qu.: 0.000
                                       1st Qu.: 1.000
                                                         1st Qu.:1955
##
    Median : 0.000
                     Median : 0.000
                                       Median : 1.000
                                                         Median:1970
##
    Mean
           :0.113
                     Mean : 0.767
                                       Mean : 1.376
                                                         Mean
                                                                 :1928
##
    3rd Qu.:0.000
                     3rd Qu.: 1.000
                                       3rd Qu.: 1.000
                                                         3rd Qu.:1984
           :1.000
                                               :98.000
                                                                 :2000
                     Max.
                            :98.000
                                       Max.
                                                         Max.
           :8694
##
    NA's
                     NA's
                            :8694
                                       NA's
                                               :8694
                                                         NA's
                                                                 :8694
                      Marital.Status
##
      Education
                                        WhiteCaucasian
                                                         BlackAfrican.American
##
                      Min.
    Min.
           : 1.000
                             : 1.000
                                        Min.
                                                :0.000
                                                         Min.
                                                                :0.000
    1st Qu.: 5.000
                                                         1st Qu.:0.000
                      1st Qu.: 1.000
                                        1st Qu.:1.000
    Median : 6.000
##
                      Median : 1.000
                                        Median :1.000
                                                         Median : 0.000
##
    Mean
          : 6.486
                      Mean
                             : 2.577
                                        Mean
                                                :0.799
                                                         Mean
                                                                 :0.066
##
    3rd Qu.: 7.000
                      3rd Qu.: 2.000
                                        3rd Qu.:1.000
                                                         3rd Qu.:0.000
##
    Max.
           :98.000
                      Max.
                              :98.000
                                        Max.
                                                :1.000
                                                         Max.
                                                                 :1.000
##
    NA's
           :8694
                      NA's
                              :8694
                                        NA's
                                                :8694
                                                         NA's
                                                                 :8694
##
                                             Other.7
                                                           Prefer.not.to.answer
    AsianAsian.American LatinoHispanic
##
    Min.
           :0.00
                         Min.
                                :0.000
                                          Min.
                                                  :0.000
                                                           Min.
                                                                   :0.000
##
    1st Qu.:0.00
                         1st Qu.:0.000
                                          1st Qu.:0.000
                                                           1st Qu.:0.000
##
    Median:0.00
                         Median : 0.000
                                          Median : 0.000
                                                           Median : 0.000
```

```
## Mean
          :0.09
                      Mean :0.056
                                     Mean :0.019
                                                    Mean :0.013
## 3rd Qu.:0.00
                      3rd Qu.:0.000
                                     3rd Qu.:0.000
                                                    3rd Qu.:0.000
                                     Max. :1.000
## Max. :1.00
                      Max. :1.000
                                                    Max. :1.000
                                                           :8694
## NA's
          :8694
                      NA's :8694
                                     NA's :8694
                                                    NA's
## Household.annual.income
## Min. : 1.00
## 1st Qu.: 5.00
## Median: 8.00
## Mean :13.23
## 3rd Qu.:11.00
## Max.
          :98.00
## NA's
          :8694
## Did.you.have.to.go.through.security.again.at.connecting.airport
## Min.
          :0.000
## 1st Qu.:0.000
## Median :0.000
## Mean
         :0.309
## 3rd Qu.:1.000
## Max. :1.000
## NA's
          :31489
## Crowd.within.airport.terminal.building Likelihood.to.recommend.NPS
## Min. :1.000
                                        Min.
                                              : 0.000
## 1st Qu.:2.000
                                        1st Qu.: 7.000
## Median :2.000
                                        Median : 9.000
## Mean :2.461
                                        Mean : 8.183
## 3rd Qu.:3.000
                                        3rd Qu.:10.000
## Max. :4.000
                                        Max.
                                              :10.000
## NA's
          :8694
                                        NA's
                                               :8694
## WestJet.FF.Level Notice.construction.at.airport
## Min. : 1.00
                  Min.
                          :0.000
## 1st Qu.: 1.00
                  1st Qu.:0.000
## Median : 2.00
                   Median :0.000
## Mean : 5.62
                   Mean :0.889
## 3rd Qu.: 2.00
                   3rd Qu.:2.000
## Max. :99.00
                   Max. :2.000
## NA's
         :39066
                   NA's
                          :8694
## Had.to.wait.in.line.for.the.restrooms
## Min. : 0.00
## 1st Qu.: 0.00
## Median: 0.00
## Mean : 1.83
## 3rd Qu.: 1.00
## Max. :99.00
## NA's :17185
## Stall.was.in.good.condition.eg.free.of.broken.or.worn.out.parts
## Min.
         : 0.000
## 1st Qu.: 1.000
## Median : 1.000
## Mean : 6.911
## 3rd Qu.: 1.000
## Max. :99.000
## NA's :17185
## Countertops.and.floors.were.dry Floors.were.in.good.repair
## Min. : 0.000
                                 Min.
                                       : 0.000
```

```
## 1st Qu.: 1.000
                                  1st Qu.: 1.000
## Median: 1.000
                                  Median : 1.000
## Mean : 5.418
                                  Mean : 4.906
                                  3rd Qu.: 1.000
## 3rd Qu.: 1.000
## Max.
         :99.000
                                  Max.
                                       :99.000
## NA's
          :17185
                                  NA's
                                       :17185
## Fixtures.were.working.eg.faucets.soap.dispenser.hand.dryer.etc
         : 0.000
## Min.
## 1st Qu.: 1.000
## Median : 1.000
## Mean : 2.881
## 3rd Qu.: 1.000
## Max.
        :99.000
## NA's :17185
## Walls.were.free.of.markings.and.graffiti Restrooms.felt.cramped.for.space
## Min. : 0.000
                                          Min.
                                                : 0.000
## 1st Qu.: 1.000
                                          1st Qu.: 0.000
## Median: 1.000
                                          Median : 0.000
## Mean : 4.486
                                          Mean : 2.448
## 3rd Qu.: 1.000
                                          3rd Qu.: 1.000
## Max. :99.000
                                          Max.
                                                :99.000
## NA's :17185
                                          NA's
## Overall.restrooms.were.clean Yes.and.it.was.obstructive
## Min. : 0.000
                               Min. :0.000
## 1st Qu.: 1.000
                               1st Qu.:0.000
## Median: 1.000
                               Median : 0.000
## Mean : 2.663
                               Mean :0.049
## 3rd Qu.: 1.000
                               3rd Qu.:0.000
## Max. :99.000
                               Max. :1.000
## NA's :17185
                               NA's
                                     :8694
## Yes.and.it.was.too.loud Yes.and.it.did.not.disrupt.my.travel.experience
## Min. :0.000
                          Min.
                                 :0.000
## 1st Qu.:0.000
                          1st Qu.:0.000
## Median :0.000
                          Median : 0.000
## Mean :0.029
                          Mean :0.201
## 3rd Qu.:0.000
                          3rd Qu.:0.000
## Max. :1.000
                          Max. :1.000
## NA's
          :8694
                          NA's
                                :8694
## No.there.was.no.construction Dont.know.1
                                                 Parking
## Min. :0.000
                               Min. :0.000
                                              Min. :0.00
  1st Qu.:0.000
                               1st Qu.:0.000
                                              1st Qu.:0.00
                               Median :0.000
## Median :1.000
                                              Median:0.00
## Mean :0.503
                               Mean :0.226
                                              Mean :0.33
## 3rd Qu.:1.000
                               3rd Qu.:0.000
                                              3rd Qu.:1.00
## Max.
         :1.000
                                     :1.000
                                                    :1.00
                               Max.
                                              Max.
## NA's
                               NA's
                                              NA's
                                                   :38648
          :8694
                                      :8694
   Checkin.area
                  Security.area
                                  Gate.area.1
                                                 Baggage.claim.area.1
## Min. :0.00
                                  Min. :0.00
                                                 Min. :0.00
                  Min. :0.00
## 1st Qu.:0.00
                  1st Qu.:0.00
                                  1st Qu.:0.00
                                                 1st Qu.:0.00
## Median :0.00
                  Median:0.00
                                  Median:0.00
                                                 Median:0.00
                         :0.29
## Mean
         :0.35
                  Mean
                                  Mean
                                       :0.36
                                                 Mean
                                                       :0.19
## 3rd Qu.:1.00
                  3rd Qu.:1.00
                                  3rd Qu.:1.00
                                                 3rd Qu.:0.00
## Max. :1.00
                                                 Max. :1.00
                  Max.
                         :1.00
                                  Max.
                                        :1.00
## NA's
          :38648
                         :38648
                                        :38648
                                                 NA's :38648
                  NA's
                                  NA's
```

```
Ground.transportation.area.eg.taxi.shuttle.etc Restrooms.1
## Min.
          :0.00
                                                Min.
                                                       :0.00
                                                1st Qu.:0.00
## 1st Qu.:0.00
## Median :0.00
                                                Median:0.00
## Mean :0.25
                                                Mean
                                                       :0.16
## 3rd Qu.:0.00
                                                3rd Qu.:0.00
## Max.
         :1.00
                                                Max.
                                                       :1.00
## NA's
          :38648
                                                NA's
                                                       :38648
## Food.and.beverage.areas Retail.shops.area
                                              Other.8
## Min.
          :0.00
                                 :0.00
                                                  :0.00
                          Min.
                                           Min.
## 1st Qu.:0.00
                          1st Qu.:0.00
                                           1st Qu.:0.00
## Median :0.00
                          Median:0.00
                                           Median:0.00
                                :0.07
## Mean
         :0.15
                          Mean
                                           Mean
                                                  :0.03
## 3rd Qu.:0.00
                          3rd Qu.:0.00
                                           3rd Qu.:0.00
## Max.
          :1.00
                          Max.
                                 :1.00
                                           Max.
                                                  :1.00
                          NA's
## NA's
          :38648
                                 :38648
                                           NA's
                                                  :38648
## Total.times.traveled.North.America.12.months
## Min. : 0.000
## 1st Qu.: 2.000
## Median: 4.000
         : 6.309
## Mean
## 3rd Qu.: 7.000
## Max.
          :300.000
## NA's
          :8694
## Total.times.traveled.outside.North.America.12.months
## Min. : 0.000
## 1st Qu.: 0.000
## Median : 0.000
## Mean
         : 1.656
## 3rd Qu.: 2.000
## Max.
          :300.000
## NA's
          :8694
## Total.times.traveled.12.months When.left.for.airport Length.of.trip
## Min. : 1.000
                                       :1.000
                                                      Min. : 0.00
                                 Min.
## 1st Qu.: 3.000
                                 1st Qu.:1.000
                                                      1st Qu.: 3.00
## Median: 5.000
                                 Median :2.000
                                                      Median: 5.00
## Mean : 7.964
                                 Mean :2.032
                                                      Mean : 8.55
## 3rd Qu.: 8.000
                                 3rd Qu.:3.000
                                                      3rd Qu.: 8.00
## Max.
          :600.000
                                 Max. :4.000
                                                      Max.
                                                             :92.00
          :8694
                                 NA's
                                        :8694
                                                             :8694
## NA's
                                                      NA's
## Dollars.paid.for.parking.fees
## Min.
         : 0.00
## 1st Qu.: 8.00
## Median : 11.00
## Mean
         : 21.43
## 3rd Qu.: 20.00
## Max.
          :500.00
## NA's
          :35328
## Dollars.paid.for.transportation.service.to.Evaluated.Airport
## Min. : 0.00
## 1st Qu.: 18.00
## Median : 28.00
## Mean : 39.93
## 3rd Qu.: 45.00
```

```
:500.00
## Max.
## NA's
        :34753
## Dollars.paid.for.rental.car
## Min. : 0.00
## 1st Qu.: 30.00
## Median : 40.00
## Mean : 64.69
## 3rd Qu.: 65.00
## Max. :500.00
## NA's
        :36637
## Dollars.paid.for.public.transportation.service.to.Airport
## Min. : 0.0
## 1st Qu.: 3.0
## Median: 7.0
## Mean : 19.9
## 3rd Qu.: 18.0
## Max. :500.0
## NA's :38773
## Dollars.paid.for.WiFi.connection
                                    NAflag
## Min. : 0.000
                                 Min. :1
## 1st Qu.: 0.000
                                 1st Qu.:1
## Median : 0.000
                                 Median:1
## Mean : 1.541
                                 Mean :1
## 3rd Qu.: 0.000
                                 3rd Qu.:1
## Max. :100.000
                                 Max. :1
## NA's :26565
                                 NA's
## Time.to.travel.to.terminal.after.parking
## Min. :1.00
## 1st Qu.:1.00
## Median :2.00
## Mean :2.04
## 3rd Qu.:3.00
## Max. :4.00
## NA's :33744
## Time.to.wait.for.shuttle.busvan.to.take.you.to.airport
## Min. :1.00
## 1st Qu.:1.00
## Median :1.00
## Mean :1.75
## 3rd Qu.:2.00
## Max. :5.00
## NA's :37763
## Time.to.travel.to.airport.terminal.once.boarded.shuttle.busvan
## Min. :1.00
## 1st Qu.:1.00
## Median :2.00
## Mean :1.88
## 3rd Qu.:2.00
## Max. :5.00
## NA's :37811
## Time.to.obtain.boarding.pass.andor.check.baggage
## Min. :1.000
## 1st Qu.:1.000
## Median :2.000
```

```
:2.472
## Mean
## 3rd Qu.:3.000
## Max.
         :5.000
## NA's
         :13252
## Time.to.get.through.security.check.from.time.entered.airport.complex
## Min. : 0.00
## 1st Qu.: 15.00
## Median : 25.00
## Mean : 29.51
## 3rd Qu.: 40.00
## Max.
         :360.00
## NA's
          :8694
## Time.to.get.through.security.check.from.time.entered.airport.complex.1
## Min.
         :1.000
## 1st Qu.:1.000
## Median :2.000
## Mean :2.259
## 3rd Qu.:3.000
## Max. :5.000
## NA's
        :8694
##
   NPS.Promoter
                  NPS.Passive
                                NPS.Detractor
                                                 NPS.Recode
## Min. :0.000 Min. :0.000 Min. :0.000 Min. :-100.00
## 1st Qu.:0.000 1st Qu.:0.000
                                1st Qu.:0.000
                                               1st Qu.: 0.00
                                               Median: 100.00
## Median :1.000 Median :0.000
                                Median :0.000
## Mean :0.501 Mean :0.346
                                Mean :0.153
                                               Mean : 34.72
## 3rd Qu.:1.000 3rd Qu.:1.000
                                3rd Qu.:0.000
                                               3rd Qu.: 100.00
## Max. :1.000 Max. :1.000
                                Max. :1.000
                                               Max. : 100.00
## NA's
         :8694
                 NA's
                        :8694
                                NA's
                                       :8694
                                               NA's
                                                     :8694
##
                 Minutes.to.get.through.the.security.check
     NPS.Groups
         :1.000 Min. : 0.00
## Min.
## 1st Qu.:2.000 1st Qu.: 6.00
                Median : 10.00
## Median :3.000
## Mean :2.347
                  Mean : 15.01
## 3rd Qu.:3.000
                  3rd Qu.: 20.00
## Max. :3.000
                  Max. :180.00
## NA's
        :8694
                  NA's
                        :6004
## Amount.of.time.required.for.security.check
## Min. : 1.000
## 1st Qu.: 6.000
## Median: 8.000
## Mean : 7.993
## 3rd Qu.: 9.000
## Max.
        :99.000
## NA's :6004
## Professionalism.of.security.staff
## Min. : 1.000
## 1st Qu.: 7.000
## Median: 8.000
## Mean : 8.282
## 3rd Qu.:10.000
## Max. :99.000
## NA's :6004
## Ability.of.security.process.to.make.you.feel.safe
## Min. : 1.000
```

```
1st Qu.: 7.000
   Median : 8.000
   Mean : 8.451
   3rd Qu.:10.000
##
##
   Max.
         :99.000
##
  NA's
           :6004
  Overall.security.check.experience Foodbeverages.purchased RestaurantBar
##
  Min.
          : 1.000
                                     Min. :0.0000
                                                             Min.
                                                                    :0.000
##
   1st Qu.: 7.000
                                     1st Qu.:0.0000
                                                             1st Qu.:0.000
##
   Median : 8.000
                                     Median :0.0000
                                                             Median :0.000
   Mean
         : 7.801
                                     Mean :0.4858
                                                             Mean
                                                                    :0.338
                                     3rd Qu.:1.0000
##
   3rd Qu.: 9.000
                                                             3rd Qu.:1.000
##
   Max.
          :10.000
                                     Max.
                                            :1.0000
                                                             Max.
                                                                    :1.000
##
  NA's
           :6004
                                                             NA's
                                                                    :20662
  Fast.food.chain Convenience.store Standalone.kiosk Vending.machine
##
   Min.
          :0.000
                   Min.
                          :0.000
                                     Min.
                                           :0.000
                                                      Min.
                                                             :0.000
##
   1st Qu.:0.000
                   1st Qu.:0.000
                                     1st Qu.:0.000
                                                      1st Qu.:0.000
   Median :0.000
                   Median :0.000
                                     Median :0.000
                                                      Median : 0.000
##
   Mean
         :0.454
                   Mean
                        :0.241
                                                      Mean
                                     Mean
                                           :0.122
                                                            :0.045
##
   3rd Qu.:1.000
                   3rd Qu.:0.000
                                     3rd Qu.:0.000
                                                      3rd Qu.:0.000
##
   Max.
         :1.000
                   Max.
                          :1.000
                                     Max.
                                            :1.000
                                                      Max.
                                                             :1.000
##
   NA's
          :20662
                   NA's
                          :20662
                                     NA's
                                           :20662
                                                      NA's
                                                             :20662
##
      Other.10
                   Variety.of.menu.choices QualityTaste.of.food.and.beverage
   Min. :0.000
                   Min. : 1.00
                                           Min. : 1.00
   1st Qu.:0.000
                   1st Qu.: 6.00
                                           1st Qu.: 7.00
   Median : 0.000
                   Median: 8.00
                                           Median: 8.00
##
  Mean
         :0.017
                   Mean : 8.81
                                           Mean : 8.21
   3rd Qu.:0.000
                   3rd Qu.: 9.00
                                           3rd Qu.: 9.00
##
  Max.
         :1.000
                          :99.00
                                           Max.
                                                  :99.00
                   Max.
  NA's
          :20662
                   NA's
                          :33588
                                           NA's
                                                  :33588
##
   Ambiance.atmosphere Courtesy.of.staff Timeliness.of.your.order
##
         : 1.00
                       Min.
                            : 1.00
                                         Min.
                                              : 1.00
   1st Qu.: 6.00
                       1st Qu.: 7.00
                                         1st Qu.: 7.00
  Median: 8.00
                       Median: 9.00
                                         Median: 8.00
   Mean : 8.16
                       Mean : 8.39
                                         Mean : 8.07
##
   3rd Qu.: 9.00
                       3rd Qu.:10.00
                                         3rd Qu.: 9.00
##
  Max.
         :99.00
                       Max.
                             :99.00
                                         Max.
                                                :99.00
##
  NA's
          :33588
                       NA's
                              :33588
                                         NA's
                                                :33588
   Cleanliness.of.area Reasonableness.of.the.price.1
##
  Min. : 1.00
                       Min.
                              : 1.00
   1st Qu.: 7.00
                       1st Qu.: 5.00
##
  Median: 8.00
                       Median: 7.00
   Mean : 8.33
                       Mean : 7.08
##
   3rd Qu.:10.00
                       3rd Qu.: 9.00
  Max.
          :99.00
                       Max.
                              :99.00
## NA's
                       NA's
          :33588
                              :33588
   Overall.restaurant.experience Quality.of.food.and.beverage
  Min. : 1.00
                                 Min. : 1.000
   1st Qu.: 7.00
                                 1st Qu.: 6.000
## Median: 8.00
                                 Median : 8.000
         : 7.85
                                       : 8.215
  Mean
                                 Mean
## 3rd Qu.: 9.00
                                 3rd Qu.: 9.000
## Max.
          :10.00
                                 Max.
                                        :99.000
## NA's
          :33588
                                 NA's
                                        :27257
```

```
Variety.of.food.and.beverage Reasonableness.of.the.price.2
##
  Min.
         : 1.000
                                 Min.
                                       : 1.000
   1st Qu.: 6.000
                                 1st Qu.: 5.000
## Median: 8.000
                                 Median : 7.000
   Mean
         : 8.123
                                 Mean
                                        : 6.728
##
   3rd Qu.: 9.000
                                 3rd Qu.: 8.000
   Max.
          :99.000
                                 Max.
                                        :99.000
  NA's
          :27257
                                 NA's
                                        :27257
##
   Speed.of.service Availability.of.nearby.seating
  Min. : 1.000
                    Min. : 1.00
   1st Qu.: 6.000
                     1st Qu.: 6.00
  Median : 8.000
                     Median: 8.00
##
   Mean
         : 8.261
                     Mean
                           :10.59
##
   3rd Qu.: 9.000
                     3rd Qu.: 9.00
## Max.
          :99.000
                     Max.
                            :99.00
##
   NA's
           :27257
                     NA's
                            :27257
##
   Overall.food..beverage.experience BooksMagazines
                                                          Clothing
   Min. : 1.000
                                      Min.
                                            :0.0000
                                                       Min.
                                                              :0.00000
   1st Qu.: 6.000
                                      1st Qu.:0.0000
                                                       1st Qu.:0.00000
## Median: 8.000
                                      Median :0.0000
                                                       Median : 0.00000
##
   Mean
          : 7.312
                                      Mean
                                            :0.1336
                                                       Mean
                                                              :0.06336
   3rd Qu.: 9.000
                                      3rd Qu.:0.0000
                                                       3rd Qu.:0.00000
   Max.
##
          :10.000
                                      Max.
                                             :1.0000
                                                       Max.
                                                              :1.00000
##
   NA's
           :27257
##
                                          Toiletries
      Sunglasses
                      Electronics
                                                          Other.merchandise
   Min.
          :0.00000
                     Min.
                            :0.00000
                                              :0.00000
                                                          Min.
                                                                 :0.00000
##
   1st Qu.:0.00000
                      1st Qu.:0.00000
                                        1st Qu.:0.00000
                                                          1st Qu.:0.00000
   Median :0.00000
                     Median :0.00000
                                        Median :0.00000
                                                          Median :0.00000
##
   Mean
          :0.05465
                     Mean
                           :0.05333
                                        Mean
                                              :0.05455
                                                          Mean
                                                                 :0.05711
                      3rd Qu.:0.00000
   3rd Qu.:0.00000
                                        3rd Qu.:0.00000
                                                          3rd Qu.:0.00000
##
   Max.
          :1.00000
                     Max.
                           :1.00000
                                        Max.
                                               :1.00000
                                                          Max.
                                                                 :1.00000
##
##
   Other.services
                     Didnt.purchase.any.merchandiseservices
##
   Min.
          :0.0000
                          :0.0000
                     Min.
                     1st Qu.:0.0000
##
   1st Qu.:0.0000
   Median :0.0000
                     Median :1.0000
   Mean
         :0.0168
                     Mean
                          :0.7198
                     3rd Qu.:1.0000
##
   3rd Qu.:0.0000
##
   Max.
         :1.0000
                     Max.
                           :1.0000
##
   Quality.of.merchandiseservices Variety.of.shops
##
  Min. : 1.000
                                  Min.
                                         : 1.000
   1st Qu.: 7.000
                                   1st Qu.: 7.000
##
  Median : 8.000
                                   Median: 8.000
  Mean
         : 8.924
                                         : 8.928
                                   Mean
   3rd Qu.:10.000
##
                                   3rd Qu.:10.000
   Max.
          :99.000
                                   Max.
                                          :99.000
##
  NA's
           :28924
                                   NA's
                                          :28924
   Reasonableness.of.the.price.3 Professionalism.of.staff
   Min.
          : 1.000
                                  Min. : 1.000
                                  1st Qu.: 7.000
##
  1st Qu.: 5.000
## Median: 8.000
                                  Median : 9.000
## Mean : 8.104
                                  Mean : 9.048
## 3rd Qu.: 9.000
                                  3rd Qu.:10.000
```

```
:99.000
                               Max.
                                      :99.000
## NA's
         :28924
                               NA's :28924
## Overall.retail.services.experience
## Min. : 1.000
## 1st Qu.: 7.000
## Median: 8.000
## Mean : 7.962
## 3rd Qu.:10.000
## Max. :10.000
## NA's
         :28924
## Now.that.you.have.considered.your.food.beverage..retail.experiences.how.would.you.rate.your..overal
## Min. : 1.00
## 1st Qu.: 7.00
## Median: 8.00
## Mean : 7.83
## 3rd Qu.: 9.00
## Max. :10.00
## NA's :32117
## Took.transportation.to.the.gate Type.of.transportation.taken.to.the.gate
## Min. : 0.000
                                 Min. : 1.00
## 1st Qu.: 0.000
                                 1st Qu.: 1.00
## Median: 0.000
                                 Median: 2.00
## Mean : 2.258
                                 Mean : 6.97
## 3rd Qu.: 0.000
                                 3rd Qu.: 2.00
## Max. :99.000
                                 Max. :97.00
                                 NA's
                                       :35776
## Minutes.to.the.gate.after.security.check.point
## Min. : 0.00
## 1st Qu.: 5.00
## Median: 10.00
## Mean : 11.16
## 3rd Qu.: 15.00
## Max. :180.00
##
## Clarity.of.signsdirections.inside.the.terminal
## Min. : 1.000
## 1st Qu.: 7.000
## Median: 8.000
## Mean : 8.154
## 3rd Qu.: 9.000
## Max. :99.000
##
## Cleanliness.of.terminal.concourses.and.hallways
## Min. : 1.000
## 1st Qu.: 7.000
## Median: 8.000
## Mean : 8.145
## 3rd Qu.: 9.000
## Max. :99.000
##
## Comfort.in.airport.eg.seating.roominess.etc
## Min. : 1.000
## 1st Qu.: 6.000
## Median: 8.000
```

```
## Mean : 7.818
## 3rd Qu.: 9.000
## Max. :99.000
##
## Availability.of.activityentertainment.options.in.the.airport
## Min. : 1.00
## 1st Qu.: 6.00
## Median: 8.00
## Mean :19.81
## 3rd Qu.:10.00
## Max. :99.00
##
## Overall.terminal.facilities.experience
## Min. : 1.000
## 1st Qu.: 7.000
## Median: 8.000
## Mean : 7.761
## 3rd Qu.: 9.000
## Max. :10.000
##
## Variety.of.food.beverage.and.retail.options
## Min. : 1.00
## 1st Qu.: 6.00
## Median: 8.00
## Mean :12.07
## 3rd Qu.: 9.00
## Max. :99.00
## Cleanliness.of.terminal.restrooms Flight.departed
## Min. : 1.00
                                   Min.
                                         :1.000
## 1st Qu.: 7.00
                                   1st Qu.:2.000
## Median: 8.00
                                   Median :2.000
## Mean :13.72
                                   Mean :2.069
## 3rd Qu.:10.00
                                   3rd Qu.:2.000
## Max. :99.00
                                   Max. :4.000
##
## How.would.you.rate.your.overall.experience.at.Airport.Evaluated
## Min. : 1.000
## 1st Qu.: 7.000
## Median: 8.000
## Mean : 7.843
## 3rd Qu.: 9.000
## Max. :10.000
##
## Connecting.Region Connecting.State
                                       Airport
## Min.
                    Min. : 1.0
         :1.000
                                    Min. : 1.00
## 1st Qu.:1.000
                    1st Qu.: 4.0
                                    1st Qu.:18.00
## Median :1.000
                    Median:14.0
                                    Median :33.00
## Mean :1.066
                    Mean :14.7
                                    Mean :32.21
## 3rd Qu.:1.000
                    3rd Qu.:23.0
                                    3rd Qu.:46.00
## Max. :2.000
                    Max. :37.0
                                    Max. :64.00
##
## Dollars.paid.per.person.at.restaurantbar Dollars.spent.on.foodbeverages
## Min. : 0.00
                                          Min. : 0.00
```

```
## 1st Qu.: 12.00
                                          1st Qu.: 6.00
## Median : 20.00
                                          Median : 10.00
## Mean : 25.42
                                          Mean : 14.75
## 3rd Qu.: 30.00
                                          3rd Qu.: 15.00
## Max. :500.00
                                          Max.
                                                :500.00
## NA's
         :34339
                                          NA's
                                                :27040
## Dollars.spent.on.merchandiseservices Amount.spent.in.terminal.USD
## Min. : 0.000
                                      Min. :
                                                0.00
## 1st Qu.: 7.707
                                      1st Qu.:
                                                4.00
                                      Median : 11.00
## Median : 15.000
## Mean : 30.907
                                      Mean : 25.96
## 3rd Qu.: 30.000
                                      3rd Qu.: 25.00
## Max. :500.000
                                      Max. :1500.00
## NA's :31105
                                      NA's :15377
## Time.spent.in.terminal.connecting.airport
## Min.
         :1.000
## 1st Qu.:1.000
## Median :2.000
## Mean :2.102
## 3rd Qu.:3.000
## Max. :5.000
## NA's :5468
## Time.to.get.through.security.check.connecting.airport
## Min. :1.000
## 1st Qu.:1.000
## Median :1.000
## Mean :1.746
## 3rd Qu.:2.000
## Max. :5.000
## NA's :6004
## DepartingArriving.Airport.vs.Connecting.Airport
## Min.
          :1.000
## 1st Qu.:1.000
## Median :1.000
## Mean :1.216
## 3rd Qu.:1.000
## Max. :2.000
##
## The.signagedirections.were.cleareasy.to.understand
## Min. : 1.000
## 1st Qu.: 3.000
## Median : 4.000
## Mean : 4.605
## 3rd Qu.: 4.000
## Max. :99.000
##
## There.were.enough.signsdirections.throughout.the.terminal
## Min. : 1.0
## 1st Qu.: 3.0
## Median: 4.0
## Mean : 4.7
## 3rd Qu.: 4.0
## Max.
          :99.0
##
```

```
## Recent.completed.renovations.or.new.buildings
## Min. : 0.00
## 1st Qu.: 0.00
## Median: 1.00
## Mean :45.87
## 3rd Qu.:99.00
## Max. :99.00
##
## Regional.art.culture.or.historical.displays
## Min. : 0.00
## 1st Qu.: 1.00
## Median: 1.00
## Mean
         :32.46
## 3rd Qu.:99.00
## Max. :99.00
##
## Robots.tablet.interfacing.or.other.new.technology
## Min. : 0.00
## 1st Qu.: 0.00
## Median : 1.00
## Mean
         :46.66
## 3rd Qu.:99.00
## Max. :99.00
## I.was.able.to.clearly.hear.and.understand.the.announcements.within.the.gate
## Min. : 0.000
## 1st Qu.: 1.000
## Median: 1.000
## Mean : 3.649
## 3rd Qu.: 1.000
## Max. :99.000
##
## The.gate.area.was.clean There.were.enough.seats.at.the.gate
                        Min. : 0.000
## Min. : 0.000
## 1st Qu.: 1.000
                         1st Qu.: 0.000
## Median : 1.000
                         Median : 1.000
## Mean : 3.321
                         Mean : 3.568
## 3rd Qu.: 1.000
                          3rd Qu.: 1.000
## Max. :99.000
                          Max. :99.000
##
## The.gate.area.was.comfortable
## Min. : 0.0
## 1st Qu.: 1.0
## Median: 1.0
## Mean : 3.9
## 3rd Qu.: 1.0
## Max. :99.0
##
## There.were.enough.electrical.outlets.for.charging.phoneslaptops
## Min. : 0.00
## 1st Qu.: 0.00
## Median: 1.00
## Mean :19.35
## 3rd Qu.: 1.00
```

```
## Max. :99.00
##
##
   The.gate.area.was.worn.out.or.outdated
                                          Segment
                                                     Generation.Groups
## Min. : 0.000
                                       Min. :1.000
                                                     Min. : 1.000
   1st Qu.: 0.000
                                       1st Qu.:2.000
                                                     1st Qu.: 2.000
## Median : 0.000
                                       Median :3.000
                                                     Median : 3.000
  Mean : 5.822
                                       Mean :2.391
                                                     Mean : 5.142
   3rd Qu.: 1.000
                                       3rd Qu.:3.000
                                                      3rd Qu.: 4.000
##
##
  Max. :99.000
                                       Max. :3.000
                                                     Max. :98.000
##
                                                      NA's
                                                            :8694
## OSAT.Zones.of.Satisfaction
                               Age
                                              weight
## Min. :1.00
                            Min. : 18.00
                                          Min. : 49448
  1st Qu.:2.00
                            1st Qu.: 34.00
                                           1st Qu.:123795
## Median :3.00
                            Median : 48.00
                                           Median :162384
## Mean :2.71
                            Mean : 47.91
                                           Mean :159253
##
   3rd Qu.:3.00
                            3rd Qu.: 62.00
                                           3rd Qu.:187717
##
  Max. :4.00
                            Max. :100.00
                                           Max. :314312
                            NA's :9408
##
## Parking.Index
                  Dropoff.Index Rental.Car.Index Public.Transp.Index
                  Min. : 100.0 Min. : 99.99 Min. : 100.0
## Min. : 99.99
##
  1st Qu.:685.38
                  1st Qu.: 718.4
                                1st Qu.:713.75
                                                 1st Qu.: 704.8
## Median:804.94
                   Median : 849.0
                                Median :844.82
                                                Median : 821.2
## Mean :781.52
                  Mean : 809.9
                                                  Mean : 798.5
                                 Mean :808.86
##
   3rd Qu.:899.91
                   3rd Qu.: 948.6
                                  3rd Qu.:938.79
                                                  3rd Qu.: 915.8
## Max. :999.90
                  Max. :1000.0
                                Max. :999.90
                                                 Max. :1000.0
## NA's :33744
                   NA's
                        :22464
                                  NA's :35628
                                                  NA's :38420
## RestaurantBar.Index Other.Food.and.Beverage.Index
## Min. : 100.0
                     Min. : 99.99
## 1st Qu.: 646.5
                     1st Qu.:571.84
                     Median :737.55
## Median: 800.0
## Mean : 769.9
                     Mean :715.36
## 3rd Qu.: 913.4
                     3rd Qu.:865.79
## Max. :1000.0
                     Max. :999.90
## NA's :33588
                     NA's :27257
## Retail.MerchandiseServices.Index Food.and.Beverage.Index
## Min. : 99.99
                                 Min. : 99.99
## 1st Qu.:652.89
                                 1st Qu.: 598.54
## Median :799.92
                                 Median: 758.30
                                 Mean : 733.79
## Mean :775.72
## 3rd Qu.:922.82
                                 3rd Qu.: 888.46
## Max. :999.90
                                 Max. :1000.00
                                 NA's :20662
## NA's :28924
## Food.Beverage.and.Retail.Index Airport.Accessibility.Index
## Min. : 99.99
                              Min. : 100.0
## 1st Qu.: 604.87
                               1st Qu.: 679.2
## Median : 763.44
                               Median : 800.1
                               Mean : 777.1
## Mean : 739.67
## 3rd Qu.: 893.83
                               3rd Qu.: 900.1
## Max. :1000.00
                               Max.
                                      :1000.1
## NA's
        :17469
                               NA's
                                     :8694
## Checkin.Index
                   Security.Index Terminal.Facility.Index
## Min. : 100.0 Min. : 100.0
                                Min. : 100.0
## 1st Qu.: 702.5
                  1st Qu.: 655.5
                                1st Qu.: 647.7
## Median: 812.3 Median: 800.0 Median: 786.7
```

```
## Mean : 797.3 Mean : 774.6 Mean : 759.0
## 3rd Qu.: 906.1 3rd Qu.: 930.1 3rd Qu.: 890.5
## Max. :1000.0 Max. :1000.0 Max. :1000.0
## NA's :8694
                  NA's :6004
## Baggage.Claim.Index Overall.Satisfaction.Index Immigration..Customs.Index
## Min. : 100.0
                    Min. : 99.99
                                           Min. : 100.0
## 1st Qu.: 638.6
                    1st Qu.: 659.42
                                           1st Qu.: 700.0
## Median: 800.0
                    Median : 787.28
                                           Median : 800.0
## Mean : 766.6
                    Mean : 764.84
                                           Mean : 765.9
                                           3rd Qu.: 900.0
## 3rd Qu.: 900.0
                    3rd Qu.: 887.09
## Max. :1000.0
                    Max. :1000.02
                                           Max. :1000.0
## NA's :21212
                                            NA's :35174
```