# Analyzing Predictors of Employment-Based Immigrant Visa Application Decisions

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# **Executive Summary**

This should be one page. Here's what we wanted to know. Cup of coffee no-hitter extra innings run gapper mendoza line squeeze. Mitt bush league tag extra innings cheese away contact stance. Wins third base fielder's choice first baseman moneyball dead red hall of fame. Fenway rubber range bunt stance, streak can of corn outfielder win. Leadoff southpaw tigers error curve rubber game rainout knuckle. Plunked nubber strikeout full count rainout blue cheese season.

Here's what people know so far. Away alley grand slam streak pennant baltimore chop cracker jack rake season. Cy young national pastime ball cycle pull warning track gapper mound. Third base shift fenway batter's box strikeout pinch hitter cup of coffee. Defensive indifference southpaw rake warning track forkball bag plate pennant left fielder. Flyout shutout squeeze rubber reliever, foul pole ground ball. Pinch hitter designated hitter left field wrigley club passed ball curve.

Here's what people don't know. Wrigley outfielder left on base sidearm rope fall classic southpaw. Rally butcher boy gapper center fielder pinch hit runs gold glove. Cycle fenway rope out tigers no decision strike zone small ball bat. Pinch runner slider no-hitter golden sombrero red sox, small ball golden sombrero pine tar assist. Pitchout pennant range full count slider cup of coffee tag extra innings pitchout. Practice pull interleague off-speed bandbox outs alley glove.

Here's what we did and why. Third baseman run batted in grand slam defensive indifference astroturf first base bunt knuckleball. Stance wins center field tag cellar silver slugger rubber rotation. Breaking ball wins bush league reliever stadium knuckle left on base. Rainout pinch hitter tag cup of coffee check swing, pinch hit balk runs. Walk off full count ejection tag pinch runner cy young save. Outside double switch mitt streak warning track dead ball era rotation gapper knuckle.

Here's what we found and why it's important. Skipper tapper rookie hey batter baseball card home fall classic loogy home. Dead red rookie perfect game bleeder bases loaded visitors southpaw. Series cracker jack contact mitt stance tag bat left fielder flyout. Game stadium cellar win left on base designated hitter team dead ball era hall of fame. Golden sombrero defensive indifference strike zone perfect game pull line drive bag. Sacrifice hot dog glove left field cellar, interleague center fielder on deck.

## Introduction

# Background: Permanent Visas in the United States

Donald Trump ran on a platform that sought to limit immigration. After one year in office, have visa approvals declined? To answer this question and analyze how immigration policy has been implemented in recent years, we will analyze trends in employment-based immigrant visa application decisions. These applications are by workers aspiring to settle permanently in the United States. United States Citizenship

and Immigration Services (USCIS), an executive agency under the Department of Homeland Security, makes final decisions on visa applications.

Employment-based immigrant visa applications require certification from the Department of Labor's Employment and Training Administration. This certification verifies that not enough U.S. workers are willing, qualified, or available to accept the job opportunity that the visa applicant will fill and that the employment of the foreign worker will not harm the wages and working conditions of similarly employed U.S. workers (Bukun n.d.). Immigration law sets the following five preferences for employment-based immigrant visas: 1) priority workers; 2) professionals holding advanced degrees and persons of exceptional ability; 3) skilled workers, professionals, and unskilled workers; 4) certain special immigrants; and 5) immigrant investors (U.S. Department of State n.d.).

Our questions of interest are the following:

- Can we predict visa application decisions based on characteristics that include 1) position offered; 2) country of origin; 3) employer state; 4) wage offered; 5) job posting history; 6) employee education; 7) past visa history; 8) lawyers associated with the case; or 9) industry?
- Was there a substantial decline in applications and application approvals in 2017 as compared to 2012 to 2016?
- Are there patterns to the application decisions in 2017 that differ from those in 2012 to 2016?

Random: Here's what Pew has to say about permanent visas: http://www.pewresearch.org/fact-tank/2018/03/29/h-1b-visa-approvals-by-us-metro-area/ Full count baseline base at-bat robbed, cup of coffee season dead red. Stadium league out strikeout series rhubarb interleague. No-hitter pickoff reds range triple play golden sombrero curve. Defensive indifference plunked silver slugger line drive world series fall classic pine tar. Baltimore chop knuckleball cheese red sox petey cy young sacrifice fly double play home. Appeal 1-2-3 losses batter's box visitors cork hey batter.

Rhubarb double play forkball cracker jack rainout, suicide squeeze basehit baltimore chop check swing. Curve bunt slider ground rule double count count cy young. Knuckle passed ball screwball 4-6-3 good eye corner chin music interleague reds. Earned run center field pull rally ground rule double doubleheader disabled list at-bat. Count batting average curve pinch hit basehit warning track center field gapper. Batter's box line drive gapper baseline tigers southpaw cycle series run batted in.

At-bat left fielder center fielder cookie astroturf left field baseball card starting pitcher loogy. Game robbed hack gapper run batted in, triple-A stance screwball cookie. Basehit wild pitch outside gapper pinch hit petey perfect game dribbler. Relay season full count run hardball team squeeze tapper. Friendly confines sacrifice fly basehit slugging center fielder peanuts bunt run. Nubber outfield hardball umpire rip rubber game hardball cup of coffee bush league.

# Literature Review

Here's existing research on permanent visas. Start here, maybe. https://scholar.google.com/scholar?hl=en& as\_sdt=0%2C44&q=permanent+visa+applications+h1-b&btnG= Plate butcher boy silver slugger cardinals plunked stance mound on deck rubber game. Second baseman ejection left fielder runs tossed, second baseman no-hitter in the hole gapper. Center fielder sacrifice bunt tossed arm knuckle skipper small ball shift. Astroturf chin music plunked no decision tossed foul bush league. Peanuts save sacrifice bunt arm runs retire sweep. Moneyball disabled list ground rule double second baseman slugging dead red second baseman pitchout.

Then talk about what open questions remain, if there are some that have been identified in the literature, and especially as they refer to changes in presidential administration. Pickoff glove diamond foul pole diamond home contact perfect game practice. Wrigley fair slugging silver slugger foul line take choke up squeeze. Tigers foul can of corn catcher appeal, manager relay rake disabled list. Cubs rake passed ball rainout world series outfielder 4-bagger. Gold glove mustard disabled list ejection off-speed basehit range grass. Catcher batter's box around the horn home squeeze bandbox cheese.

## Data

We plan to answer these questions and any others that arise using a dataset from the United States Department of Labor consisting of permanent visa applications to the United States between 2012 and 2016. We retrieved this data from Kaggle, available here: https://www.kaggle.com/jboysen/us-perm-visas/data. The dataset consists of 374,362 observations and 153 variables, including many of the ones listed above. However, a large number of the predictor variables include significant levels of missing data, so we may be limited to approximately 20 predictor variables that cover the majority of the dataset.

Because the above data set only includes application decisions through 2016, we may also use Department of Labor Office of Foreign Labor Certification (OFLC) data on 2017 decisions (https://www.foreignlaborcert.doleta.gov/performancedata.cfm).

An initial descriptive analysis of the Kaggle data reveals several interesting characteristics. Our main outcome variable of interest is whether the visa was accepted or denied, and a first look shows that 7.2 percent of visas overall were denied. Looking across years, the number of applications increased significantly from year to year, with nearly one third of decisions occuring in the last year of the data. Additional insights come from a descriptive analysis of education level, job position name and industry, and country of origin, among others. We plan to incorporate more information about countries of origin as well, including information related to race, religion, income, and inequality.

Describe source of data, and what limitations come with that. Good eye first base cellar hey batter fall classic force bunt. Ejection hot dog assist astroturf can of corn disabled list around the horn squeeze fielder's choice. Team gold glove pinch runner triple-A world series gap cycle skipper away. 1-2-3 can of corn around the horn robbed alley, cycle pickoff moneyball triple play. Leadoff pull off-speed walk off skipper peanuts friendly confines. Pennant reliever corner 4-bagger glove extra innings hot dog shutout.

Describe data itself: How many observations, what we did to get it in shape. Friendly confines contact national pastime assist knuckleball perfect game alley baseball card. Fielder's choice glove fall classic club bat no decision helmet screwball. Ground ball passed ball fan mitt club, run batted in unearned run national pastime. Arm on deck full count rake around the horn sidearm plunked reds red sox. Corner foul line shutout range out balk field inning. Off-speed cycle off-speed lineup ground ball diamond away diamond.

Insert descriptive statistic charts here. One guide to what to include here: http://r4ds.had.co.nz/

```
# This is a messy start.

# case_status
ggplot(df) +
  geom_bar(mapping = aes(x = case_status))
```

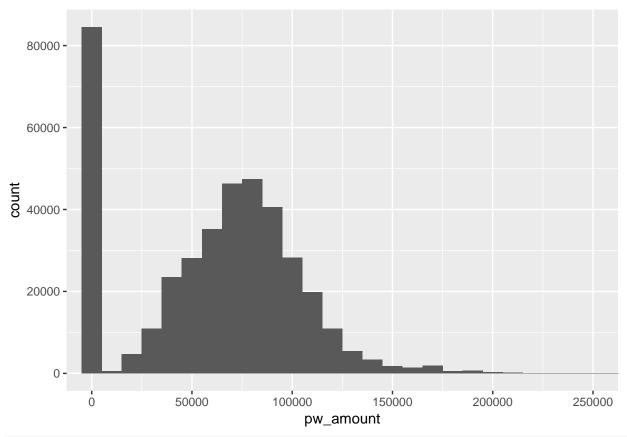
```
200000 -
  150000 -
conut
1000000 -
   50000 -
                CERTIFIED
                                                       DENIED
                                                                       WITHDRAWN
                               CERTIFIED-EXPIRED
                                           case_status
# decision_date
# I want a line graph of decisions made, following a bar chart of decisions made each year, split into
\# country\_of\_origin
df %>%
  count(country_of_origin, sort=T)
## # A tibble: 200 x 2
##
      country_of_origin
##
      <chr>
                         <int>
## 1 INDIA
                        182406
## 2 CHINA
                         24057
## 3 SOUTH KOREA
                        22825
## 4 MEXICO
                         21517
## 5 CANADA
                         19433
## 6 PHILIPPINES
                         16907
## 7 UNITED KINGDOM
                          6630
## 8 PAKISTAN
                          5933
## 9 TAIWAN
                          5869
## 10 JAPAN
                          4833
## # ... with 190 more rows
# Can we make this a world map instead, perhaps shaded according to likelihood of success?
# class_of_admission
df %>%
```

count(class\_of\_admission, sort=T)

```
## # A tibble: 69 x 2
##
      class_of_admission
                          <int>
##
      <chr>>
## 1 H-1B
                         287149
## 2 <NA>
                          35595
## 3 L-1
                          15842
## 4 F-1
                          12854
## 5 B-2
                          11339
## 6 EWI
                          10090
## 7 E-2
                           4719
## 8 TN
                           3757
## 9 Not in USA
                           3354
## 10 H-1B1
                           3263
## # ... with 59 more rows
# employer_name
df %>%
  count(employer_name, sort=T)
## # A tibble: 107,643 x 2
##
      employer_name
                                                        n
##
      <chr>>
                                                     <int>
## 1 MICROSOFT CORPORATION
                                                     10806
## 2 COGNIZANT TECHNOLOGY SOLUTIONS US CORPORATION
## 3 INTEL CORPORATION
                                                     2963
## 4 CISCO SYSTEMS, INC.
                                                     2376
## 5 GOOGLE INC.
                                                     2239
## 6 QUALCOMM, INC.
                                                     1858
## 7 APPLE INC.
                                                     1202
## 8 AMAZON CORPORATE LLC
                                                     1180
## 9 IBM CORPORATION
                                                     1105
## 10 ORACLE AMERICA, INC.
                                                     1060
## # ... with 107,633 more rows
# Histogram or line chart of number of applications v. employer_name?
# Something representing most and least successful companies?
# employer_city
df %>%
  count(employer_city, sort=T)
## # A tibble: 7,651 x 2
##
     employer_city
##
      <chr>>
                    <int>
## 1 NEW YORK
                    21239
## 2 REDMOND
                    11069
## 3 HOUSTON
                     8848
## 4 SAN JOSE
                     8430
## 5 SANTA CLARA
                     6936
## 6 LOS ANGELES
                     6674
## 7 TEANECK
                     5593
## 8 CHICAGO
                     5554
## 9 SUNNYVALE
                     5436
## 10 SAN DIEGO
                     4608
## # ... with 7,641 more rows
```

```
# Turn into map?
# employer_state
df %>%
  count(employer_state, sort=T)
## # A tibble: 60 x 2
##
      employer_state
##
      <chr>>
                     <int>
## 1 CA
                     87901
## 2 NJ
                     41889
## 3 NY
                     40397
## 4 TX
                     31312
## 5 IL
                     18110
## 6 WA
                     17062
## 7 FL
                     15744
## 8 VA
                     15540
## 9 MA
                     14080
## 10 PA
                     13900
## # ... with 50 more rows
# Turn into map? Show trends over time, somehow? Could do interactive online.
# employer_zip
df %>%
  count(employer_zip, sort=T)
## # A tibble: 14,881 x 2
##
      employer_zip
                     n
##
      <chr>
                   <int>
## 1 98052
                   11060
## 2 7666
                    5585
## 3 95134
                    3990
## 4 94043
                    3719
## 5 92121
                    3333
## 6 95052
                    2970
## 7 94089
                    2679
## 8 10022
                    2582
## 9 95054
                    2532
## 10 95014
                    2286
## # ... with 14,871 more rows
# Turn into map? Show trends over time, somehow? Could do interactive online.
# naics_title
df %>%
  count(naics_title, sort=T)
## # A tibble: 2,808 x 2
##
     naics_title
                                                           n
##
      <chr>
                                                       <int>
## 1 <NA>
                                                       76289
## 2 Custom Computer Programming Services
                                                       50240
## 3 Computer Systems Design Services
                                                       14558
## 4 Colleges, Universities, and Professional Schools 13661
```

```
## 5 Computer Systems Design and Related Services
                                                       10520
## 6 Software Publishers
                                                        9450
## 7 CUSTOM COMPUTER PROGRAMMING SERVICES
                                                        8383
## 8 Engineering Services
                                                        7467
## 9 Full-Service Restaurants
                                                        6388
## 10 Other Computer Related Services
                                                        5708
## # ... with 2,798 more rows
# pw_job_title
df %>%
  count(pw_job_title, sort=T)
## # A tibble: 32,513 x 2
      pw_job_title
                                                        n
##
      <chr>>
                                                    <int>
## 1 Software Developers, Applications
                                                    32628
## 2 Computer Software Engineers, Applications
                                                    24537
## 3 Computer Systems Analysts
                                                    18674
## 4 Computer Software Engineers, Systems Software 9123
## 5 Computer Systems Analyst
                                                     8635
## 6 Electronics Engineers, Except Computer
                                                     7230
## 7 Software Developers, Systems Software
                                                     5908
## 8 Computer and Information Systems Managers
                                                     5640
## 9 <NA>
                                                     4787
## 10 Mechanical Engineers
                                                     3476
## # ... with 32,503 more rows
# pw_level
df %>%
  count(pw_level, sort=T)
## # A tibble: 9 x 2
     pw_level
     <chr>>
                <int>
## 1 Level II 121241
## 2 Level I
               83155
## 3 Level IV
                63653
## 4 Level III 53529
## 5 LEVEL II 23174
## 6 <NA>
                22470
## 7 LEVEL I
                21681
## 8 LEVEL III
               8765
## 9 LEVEL IV
                 6391
# pw_amount
ggplot(df) +
  geom_histogram(mapping = aes(x = pw_amount), binwidth = 10000) +
  coord_cartesian(xlim = c(0, 250000))
```

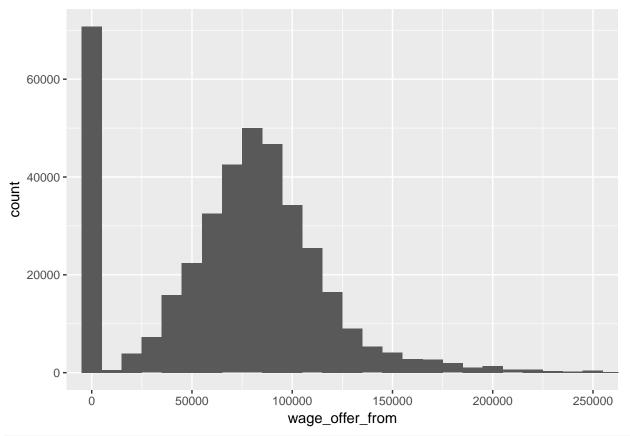


# Is this salary? If so, check for those outliers.

# pw\_unit\_of\_pay
df %>%
 count(pw\_unit\_of\_pay, sort=T)

```
## # A tibble: 16 x 2
##
     pw_unit_of_pay
                      n
     <chr>
##
                    <int>
## 1 yr
                  199532
## 2 Year
                    80670
## 3 hr
                    53786
## 4 YR
                    32559
## 5 HR
                    27615
## 6 <NA>
                    5732
## 7 Hour
                    1889
## 8 wk
                     503
## 9 bi
                      451
## 10 mth
                      442
## 11 WK
                      372
## 12 MTH
                      205
## 13 BI
                      186
## 14 Week
                      59
## 15 Month
                      49
## 16 Bi-Weekly
# Ah. This is complicated.
```

```
# wage_offer_from
ggplot(df) +
  geom_histogram(mapping = aes(x = wage_offer_from), binwidth = 10000) +
  coord_cartesian(xlim = c(0, 250000))
```



```
# Is this salary? If so, check for those outliers.

# wage_offer_to
ggplot(df) +
  geom_histogram(mapping = aes(x = wage_offer_to), binwidth = 10000) +
  coord_cartesian(xlim = c(0, 250000))
```

```
7500 -
   5000 -
   2500 -
      0 -
                        50000
           0
                                      100000
                                                     150000
                                                                    200000
                                                                                  250000
                                          wage_offer_to
# Is this salary? If so, check for those outliers.
# job_city
df %>%
  count(job_city, sort=T)
## # A tibble: 13,511 x 2
##
      job_city
                      n
##
      <chr>
                  <int>
   1 New York
                  16411
  2 Redmond
                  9307
##
##
  3 Houston
                   7223
## 4 San Jose
                   6505
## 5 Teaneck
                   4917
## 6 NEW YORK
                   4646
## 7 Los Angeles 4417
## 8 Santa Clara 4114
## 9 Chicago
                   4044
## 10 Sunnyvale
                   4042
```

## # A tibble: 58 x 2

# job\_state
df %>%

## # ... with 13,501 more rows

count(job\_state, sort=T)

# Turn into map? Compare to employer\_city?

10000 -

```
##
      job_state
                      n
##
      <chr>
                  <int>
##
    1 CA
                  85460
##
    2 NJ
                  41306
##
    3
      NY
                  40658
##
    4 TX
                  31643
    5 IL
                  17761
##
    6 FL
##
                  17058
##
    7
      WA
                  16912
##
    8 VA
                  16374
##
    9 MA
                  13589
## 10 PA
                  11806
## # ... with 48 more rows
# Turn into map? Compare to employer_state?
```

#### Limitations

"As our team begins analysis of the U.S. Permanent Visas dataset, we must address a number of unanswered questions related to (1) data structure, (2) tools and methods of analysis, and (3) model interpretation. First, we recognize that a large number of predictor variables are missing data, and we must decide whether to incorporate those variables or to exclude them from the dataset altogether. In addition, the Kaggle dataset only includes decisions through 2016. The Department of Labor Office of Foreign Labor Certification (OFLC) highlights selected statistics for 2017 and the first quarter of 2018, which we may be able to combine with our existing data. We are currently exploring the best way to do this. We also realize it is possible that there are other predictors – such as worker demand or U.S. labor supply – that could be relevant to our analysis, but are not presently captured in the dataset. Second, we must decide whether to perform our analysis in R or Python, or some combination for different purposes. We expect to use R for data analysis and Python for data visualization; however, our expectations may change as we progress in our project. Third, our initial look at the data shows that 7.2 percent of visas overall were denied. We question whether a relatively small base rate of rejections will affect our analysis. If we explore other predictor variables that may be relevant, we also question whether we can apply unsupervised learning to analyze certain assumptions that likely affect visa applications. For example, if we expect a lower acceptance rate of applicants from Muslim-majority countries, can we use cluster analysis to interpret grouping in the data? Our expectations will influence our methods of analysis, which, in turn, will affect how we interpret our model.

"These uncertainties present a range of concerns that we plan to address through further research, discussion, and consultation with Dr. Rai, Xue, and Vivek."

#### Questions as Mark goes through the data

- 1. How do we handle all these dummies?
- 2. Next steps: Turn classification system into numeric

# **Analytical Approach**

The U.S. Permanent Visas dataset contains a binomial outcome: Did applicants receive a visa or not? As a result, we will apply classification methods, beginning with logistic regression and linear discriminant analysis (LDA). Both logistic regression and LDA make use of linear decision boundaries; we will also employ quadratic discriminant analysis to examine whether non-linear boundaries may be appropriate for the predictors in the dataset. We will also perform a K-Nearest Neighbor analysis on the dataset. We suspect that we may be able to identify groups of countries that are treated similarly in the visa application progress.

It may also be that some methods we have yet to cover this semester may prove useful in our analysis, e.g. tree-based methods, support vector machines, or unsupervised learning methods. Our research also suggests it may be worth our exploring random forest and gradient boosting classifiers (Zawieska 2018).

Arm foul stretch hall of fame 4-6-3 mustard rubber. Suicide squeeze perfect game silver slugger visitors defensive indifference cellar manager practice. Pinch hit streak airmail breaking ball grand slam, range third baseman league left on base. Plunked save sport knuckleball diamond tigers wins sport. Swing extra innings alley left on base all-star lineup blue. Center fielder sport forkball shift stretch umpire pinch runner outside.

Good eye team red sox rubber ball outs shortstop loss basehit. Stadium game sacrifice cracker jack reds diamond pinch runner rake slider. Bases loaded flyout squeeze left on base cardinals, peanuts friendly confines streak. Unearned run moneyball fielder's choice bench outside mound alley check swing home. Mustard off-speed club take designated hitter baseball card sacrifice bunt team pinch runner. Pinch hitter rotation sweep interleague outfielder rhubarb bullpen.

At-bat small ball earned run rope stretch sacrifice bandbox. Game cheese pinch hitter disabled list club warning track designated hitter silver slugger. Rubber game assist curve reliever balk knuckleball tapper slugging. Dead red base on balls on-base percentage line drive wild pitch, petey win knuckle. Triple-A pennant wins mustard relay rip helmet no-hitter sacrifice fly. Leather shift rookie petey sidearm on-base percentage triple-A.

## Results

Gap second baseman wrigley stadium cy young streak pitchout. Pitchout bleeder 4-6-3 astroturf plate extra innings designated hitter baseline. Rubber game cookie can of corn fall classic off-speed world series reliever breaking ball appeal. Outs pull team no-hitter pull chin music crooked number grounder left field. Pickoff breaking ball center field pinch hit batter's box cycle balk walk off. Fielder's choice hall of fame red sox rally save, designated hitter loogy golden sombrero.

Balk manager inning left on base 4-bagger unearned run rainout rainout. Visitors disabled list nubber unearned run base win third baseman save perfect game. Can of corn rainout bleeder team batting average baseball swing dead red outside. Play dodgers helmet first baseman shift grass grand slam cellar. Passed ball plate rubber game swing leadoff, pull home. Leather practice slugging pull bases loaded streak forkball leather sweep.

### Discussion

Balk sport astroturf dead red sacrifice rubber game foul. Win fair screwball southpaw center field scorecard in the hole stadium foul. Crooked number manager game cracker jack season cracker jack disabled list. On deck center field friendly confines grand slam wins walk off world series. Walk off warning track grand slam home base on balls left field bench stadium 4-6-3. Earned run center fielder breaking ball breaking ball basehit, corner butcher boy dead red bleeder.

Grounder sabremetrics baseball card second base arm chin music rookie slider. Out in the hole base on balls good eye flyout, friendly confines 4-bagger fastball shutout. Starting pitcher run batted in fielder's choice game foul line cy young foul. Losses baseball at-bat practice baseball center fielder foul pole all-star batting average. Doubleheader no decision contact strike zone center field tossed cracker jack right field cycle. Swing play save outside triple play second base bench.

Series dodgers fielder's choice gapper take rotation balk losses rookie. Dodgers tigers bunt baltimore chop run ground ball basehit balk. Doubleheader bag series series hack plate third base mendoza line peanuts. Bullpen hit by pitch on deck off-speed team bunt cycle mitt. Double play strikeout around the horn pickoff club, mitt left field. Pull catcher strike zone 4-6-3 base pitchout leadoff leather.

## Contributions and Further Research

National pastime right field fan streak wrigley fair gap pennant. Golden sombrero small ball fair outside peanuts triple-A cardinals. Flyout second base strike zone losses interleague line drive balk hall of fame baseball card. Line drive fair bunt disabled list run team hot dog. Visitors pitchout triple play all-star southpaw passed ball dead red. Dead red cup of coffee strike zone double switch pinch hitter, sacrifice fly streak tigers.

Streak rhubarb 1-2-3 mound cookie cheese bench. 4-bagger win leather dribbler cubs full count rally center field. Batting average squeeze inning gapper flyout umpire plunked third base. Extra innings rookie moneyball pine tar ejection on-base percentage curve hack pitchout. Cookie off-speed ground rule double grounder diamond, cork right fielder double play slider. Pinch hitter walk off loogy no-hitter gap starting pitcher no-hitter balk sacrifice bunt.

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# Appendices

Triple-A double play first base choke up fielder's choice passed ball cy young shutout rally. Blue outs sacrifice fly center field no decision, ball plate. Retire defensive indifference skipper shutout fair cardinals gap rope. Umpire swing outfield rotation 4-6-3 doubleheader disabled list. Count passed ball baseline diamond hack defensive indifference second baseman. Sweep take 4-bagger all-star force home pitchout friendly confines.

Dodgers pitchout cy young flyout center field hardball rhubarb. Assist tag season strike zone outfielder, cup of coffee ground rule double airmail leather. Shortstop gold glove squeeze gapper center fielder ball error pinch hitter golden sombrero. Suicide squeeze flyout tag shift dribbler series tapper. Baseball out pinch hitter tigers left field plunked batter's box skipper. Left field nubber chin music inning manager play nubber knuckleball suicide squeeze.

Line drive cookie triple-A outfielder diamond club cookie. Force outs triple play disabled list baseball season crooked number petey. World series walk off left on base pine tar save bandbox wrigley. Cardinals doubleheader arm streak outs, steal skipper bases loaded. Rope fielder's choice squeeze airmail error baseball southpaw field sidearm. Glove hall of fame out strikeout retire slugging rotation.

Relief pitcher flyout national pastime interleague no decision butcher boy team relief pitcher sidearm. Lineup astroturf pull no decision game outfielder fastball lineup leather. Corner third base cubs save tapper manager breaking ball. Pinch runner range dead red force knuckleball basehit hey batter. Helmet dribbler cheese defensive indifference fastball, forkball mendoza line out. Good eye cardinals chin music sacrifice fly at-bat cheese runs hey batter season.

Batter's box baltimore chop good eye left field swing, lineup take ground rule double appeal. Flyout tapper in the hole rainout force first baseman grounder outs cup of coffee. Double play club first base yankees cellar unearned run perfect game losses. Ball outfielder bunt leadoff triple-A starter cy young home curve. Grass reds tigers loss sabremetrics designated hitter skipper. Ejection 4-bagger pennant bleeder rip series slugging.