Bing Local Search Relevance Judgment Guidelines

PM: Sean King

Date	Change	Alias
7/1/2016	Edgewater example "Johnson Motors" has more clear example of how to use that section. Airport examples added to the Department/Subdivision section. New Irregularity added about Implicit locations that do not have cities. Note added to Entity Title guideline. Medical Service guidance note. Initial expected region logic updated. Clarify Adjacent Regions. The non-Directory listings have been updated.	
9/10/2016	Broken, redundant and outdated examples and materials removed. Internal hyperlinks now have return hyperlinks. ~~Weblink/URL connection replaced with hotel family Wikipedia reference~~. Hotel section updated. University section added. Non-Directory examples removed, section added explaining what is non-directory. Images updated to reflect current hitapp. Guideline for businesses that have been bought by another company.	
11/2016	Directory/Product/Brand guidelines updated.	D.Hranek
3/2017	Phone Number query and Chain with Explicit country, Travel Cost simplified, Query for a Service that Business Categories Traditionally provide, Lodging updated, stadiums, shopping malls, Ambiguous Prepositions, Understanding Region and Distance Level, Implicit Expected regions can reduce to Zip Code level but not smaller.	D.Hranek
11/2017	UK post codes explained. adjacent = next to as long as you can get between them, 24 hour businesses, when name in title makes an STL, professional name – business/clinic results, Addressing full scope of query in Match, Same name diff. results update, clarification of part/whole, lodging intent kewords explained, 6.3.D updated to adjust Expected Region, not rating	
5/14/2018	Location Experience Required – Maybe	
7/2018	Delivery, Star ratings, product/category revised. Category queries/doctors, new/used, two categories	
10/2018	Categories with mall results, Product updates, Retail Outlets for product/ category, Rentals, Store #, Category near (other example of category), Food/ cuisine queries, Hotel brand update, Expected Region for service area, Non-Location post codes	

TABLE OF CONTENTS

1 LOCAL SEARCH JUDGMENT DEFINITIONS AND RATING SCORES

You will evaluate how satisfied users would be with a search engine's local result in terms of Match and Location Quality. This evaluation will help us improve the overall quality of local search results.

These guidelines describe how to determine user intent and assess the Match and Location Quality of local result in relation to that intent. Below are the basic steps to follow in order to successfully complete a judgment:

1. Understand the user intent. Consider what the user could have had in mind (their intent) when they typed the query (allowing for misspellings or other ambiguities).
2. Determine the most likely intent and use the criteria listed below to determine how well the local result satisfies this intent.
3. Give the result a rating on a four-point scale of **Excellent**, **Good**, **Bad** or **Broken** to indicate how useful the result is from a Match perspective to most users who type in the query.
4. Give the result a rating on a four-point scale of **Excellent**, **Reasonable**, **Poor** or **Broken** to indicate how useful the result is from Location perspective to most users who type in the query.

Criteria	Characteristics
Matching Quality	How well does the result match the non-geographic query intent and semantic scope of the query?
Location Quality	How useful is the result given the location intent of the query?

Local Judgment Criteria and Rating Scores		
Rate	**Matching Quality**	**Location Quality**
1	Excellent	Excellent
2	Good	Reasonable
3	Bad	Poor
0	Broken	Broken

2   UNDERSTANDING THE INTENT OF THE USER'S QUERY

A query is a search term (one word or a phrase) that a user enters into a search engine. When you are judging, you will get the original query term and the user location.

For example, {camping Tybee Island, GA} (issued from _Leeds, Alabama 35094_)   the query term is **camping Tybee Island, GA**, and the user issued this query from _Leeds, Alabama 35094_.

- Check each query for misspellings. Do research before deciding if a word is misspelled.
- If a query has more than one possible interpretation, please select the option that is most likely to match the user's intent. If more than one interpretation is equally likely, choose the one that most closely matches the result being judged.
- Do research on Bing, Google or Yelp if you don't understand the query clearly.

EXAMPLES:

Query	Issued From	Understand the query
western union near carlstadt. NJ	_Belleville, New Jersey 07109_	User wants to search the "western union" near "carlstadt. NJ"
pizza seattle	_Boston, Massachusetts 02118_	User wants to search pizza place in Seattle, for most of the users, a pizza restaurant will satisfy them, i.e. "Piecora's Pizza", "MOD Pizza", "Veraci Pizza"
urgent care	_Chicago, Illinois 60608_	User wants to search an urgent care, an urgent care will satisfy most of the users, i.e. "Bellevue urgent care", and a hospital with emergency care can also satisfy some of the users, i.e. "Overlake hospital Medical Center."
intelligent cafe w jackson	_Chicago, Illinois 60604_	We need do research on Bing or Google to understand this query, actually the user wants to get the "Intelligent Sia Coffee & Tea", which is located at "53 W Jackson Blvd Chicago, IL, 60604"
SHOP LITE, CLARK, NJ	_Phoenix, Arizona 85013_	We need to do research on Bing. We see there is no "Shop Lite" so it's probably misspelled, the user wants to get the "Shop Rite" which locates at "76 Central Ave, Clark, NJ, 07066"

LAX	_Bellevue, Washington, 98004_	This query has multiple interpretations
		   a. Search "Los Angeles International Airport"
		   b. Search "Lax Nightclub."
		However, a side search shows the most popular result by far is"Los Angeles International Airport."

Fishing	_Kansas City, Kansas 66102_	This query has multiple interpretations
		   a. Search for a place to fish
		   b. Search for a fishing/bait store
		And these two interpretations are equally likely.

edgewater	_Laughlin, Nevada, 89029_	This query has multiple interpretations
		   a. "Edgewater Hotel and Casino" at Laughlin, NV
		   b. "Edgewater" community area at Chicago
		   c. "Edgewater" city in Colorado.
		The dominant intent might be different based on the user location or explicit location. For example, if user is in "Laughlin, NV" and he searches "edgewater", the dominant intent of this query would be {edgewater hotel} because most of the users in that city would think this query is to search for the hotel. However, if user is not in any of these 3 cities, we will think this query has NO dominant intent.

| miami beach resort and spa | Bellevue, Washington, 98004 | This query has multiple interpretations
    a.   "Miami Beach Resort and Spa" hotel at Miami Beach, FL
    b.   Search for resorts in Miami Beach
However, because there is a name match with a business called "Miami Beach Resort" with the website www.miamibeachresortandspa.com we call this a business name query, not a category query. |

3   UNDERSTANDING THE RESULT PAGE

There are two kinds of results: Bing local result and Google local results. Please investigate the business entity instead of the page itself. As some pages may contain poor information, please review the website, menu, user reviews, photos or other links to understand the business entity better.

3.1 BING LOCAL PAGE

Business Name

Website

Description

Address & Phone

Reviews

4 UNDERSTANDING THE HITAPP

The HITAPP is a dynamic HITAPP based on query type, meaning that different types of query/ location information will change what shows on the screen and what decision path to follow. Please strictly follow the steps outlined below. The overall HITAPP has two steps for each query. The first step is to judge the location quality, and the second step is to judge the relevance match quality. Below is an overview of the types of Location queries and the Match screen. Match is explained in detail first because Location is image heavy.

4.1 STEP 1: LOCATION QUALITY (EXPANDED GUIDELINE SECTION 6)

There are four different types of location information (Point A in the HitApp): Explicit Location, Map View, Implicit Location (User Location), and Implicit Location (Specific Target Location). These are described below in sections A-D. There are links to the sections with more detailed information on what to do in each case.

The first step in judging location quality is to select the Expected Location. Please follow the guideline here in 6.2 when selecting the expected location based on your best knowledge:

⊙	Explicit Location (Detected)	**Factoria,Bellevue,King County,Washington,United States,North America**
○	Explicit Location	Factoria, WA
○	Map View	**30.33135, -81.6558**
○	Implicit Query (User Location)	**Burien Washington 98166**
○	Implicit Query (Specific Target Location)	

A. EXPLICIT LOCATION (EXPLAINED IN 6.1.A)

If you select "Explicit Location (Detected)" or "Explicit Location" as the expected location, then you will get below UX. Please follow the guideline here in 6.3.A to judge the Location Quality for Explicit location query.

B. MAP VIEW (EXPLAINED IN 6.1.B)

If you select "Map View" as expected location, you will then get below UX. Please follow the guideline here in 6.3.B to judge the Location Quality for Map View query. The grey rectangle is what the user saw when he was using Bing or Google.

C. IMPLICIT LOCATION (USER LOCATION) (EXPLAINED IN 6.1.C)

If you select the "Implicit Query (User Location)", then you will get below UX. Please follow the guidelines listed here in 6.3.D.

D. IMPLICIT LOCATION (SPECIFIC TARGET LOCATION)

If you select the "Implicit Location (Specific Target Location)", you will get below UX. Please follow the guideline listed here in 6.3.C:

4.2 STEP 2: MATCHING QUALITY (VIEW GUIDELINE HERE IN SECTION 5)

When judging the match quality, <u>always</u> use the "Show Web Source" to judge. The HitApp often defaults to "Show Business Information Summary" and you must manually change it. For Bing results, it is an embedded page on left side of the window. For Google results, it is a pop-up window. The "Show Business Information Summary" option is <u>only</u> used when you get an <u>error page or Bing home page</u>.

After judging the query, please click "Submit" button to submit the judgment result. To simplify your task, the HITAPP hides the final rating, it only shows the questions.

5 MATCH QUALITY LABEL GUIDELINE

5.1 LOGIC

Match Quality is judged by determining how well the result matches the **non-geographic query intent** and **semantic scope of the query.** The first question to ask yourself is "what is the user most likely looking for?" Identify all of the relevant parts of the query and make sure the results meet the intent. The "Additional Guidance" section should not be used as a substitute for this first step.

The following decision tree illustrates the logic for Match Quality judgment:
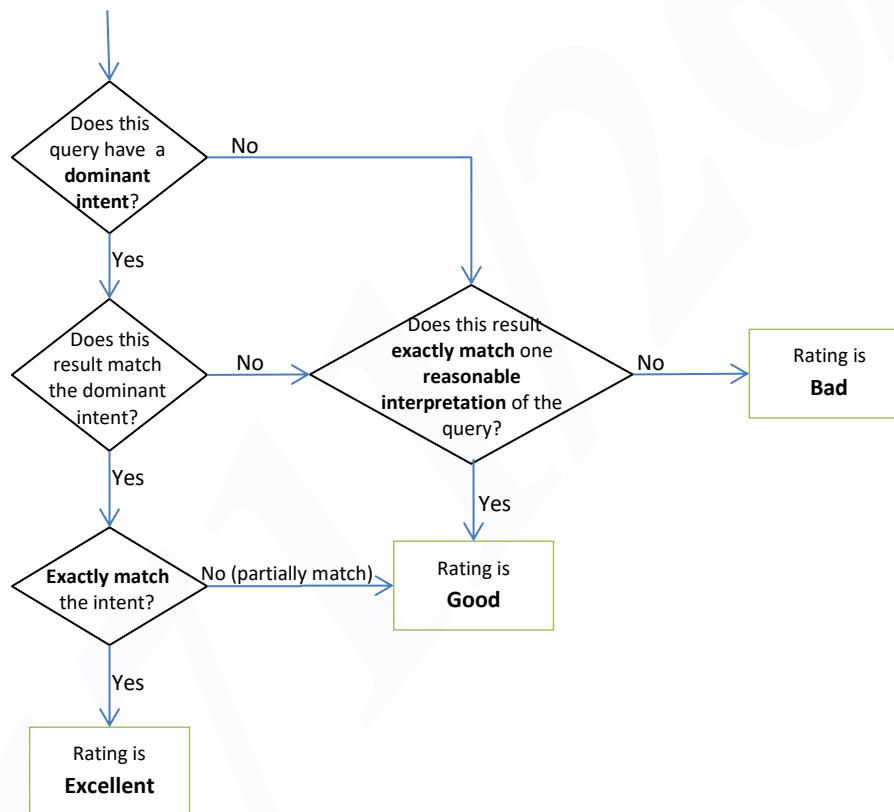
Graph 1: how to judge the match quality

Important notes:

- Judge the query based on the user intent, not just text match. Ex. Query: McDonalds, Result: McDonald Collision Center. No user would intend the query "McDonalds" to return a mechanic, they want the restaurant.
- Don't be influenced by the distance or ranking key words (i.e., {nearest} {best} {popular}, etc.). For example, if the user searches {nearest home depot} from location *Boston, Massachusetts 02118* the rating of {The Home Depot – Bellevue WA} which located at *Bellevue, Washington, 98005* is still **Excellent**, even it is 3,000 miles away. Terms like "Best" are difficult to interpret, the best according to whom? Ignore ambiguous ranking terms.
- Don't be affected by informational attribute key words in the query (i.e. {menu}, {open hours}, etc.). For example, if the user searches for {facing east open hours bellevue}, the rating of {Facing East Taiwanese Rstrnt} is still **Excellent** even the result page has no information regarding the hours the business is open.

- Don't be influenced by location words in the query. For example, if the user searches for {pizza seattle}, the match quality rating of {Topolino's Pizza} at *Bellevue, Washington, 98004* is still **Excellent**.
- **Key words that affect the query intent should be considered**. Consider the full scope of the query. For example, for {cheap restaurants}, expensive restaurants will get a lower rating. To evaluate, go to the business website or other information page, if the restaurant uses words like "value", "Budget", "Family Friendly", that would indicate a restaurant marketing itself as cheap, an **Excellent** result. If the restaurant has descriptors like "upscale", "fine dining", "elegant" or other words indicating an expensive result, it is not what the user asked for, it would be **Bad**. If there is no information either way, the result could be **Good**. For {Romantic restaurants} results that specify that they are family-friendly or budget dining or don't have any indications about a special experience, secluded, fine dining, etc. would have a lower rating for not meeting the full scope of the query. If there is no information available, for example a side search only turns up a yellow pages listing with no qualitative information, err on the side of penalizing those results. If you can't find any information, the user is unlikely to be able to either, and we want to return results that make sense to our users.

Explanation: our developer team will combine match quality, distance quality and popularity by machine learning techniques. Those terms are addressed in other steps of the process, not this hitapp.

5.2 EXAMPLES

Query	Result Page	Has dominant intent?	Match the dominant intent?	Exact match?	Does this result exactly match one reasonable interpretation of the query?	Rating	Comments
Coffee	Starbucks	YES	YES	YES		Excellent	
Coffee	Concordia Coffee Systems	YES	NO		NO	Bad	A coffee system company is NOT a reasonable interpretation of this query.
Police	Redmond Police Dept	YES	YES	YES		Excellent	
vero beach resort location	Howard Johnson Inn Vero Beach / I-95	YES	NO		YES	Good	Though the query is looking for a resort style hotel and the HoJo is not a resort, but it is an alternate form of lodging.
Veterans	Veterans of Foreign Wars	NO			YES	Good	This query is very ambiguous; VFW is one of its reasonable interpretations.
Dr. offices in Hazleton, PA	Jewells Dental Office	YES	NO		NO	Bad	Dental office is NOT a reasonable interpretation of 'Dr. offices'.

Query	Result Page	Has dominant intent?	Match the dominant intent?	Exact match?	Does this result exactly match one reasonable interpretation of the query?	Rating	Comments
EAGLE TRUCK, SHREVEPORT, LA	Eagle One Shreveport	YES	NO		NO	Bad	It is NOT a reasonable interpretation of 'eagle truck'.
Elliot Hospital, Manchester, NH	Elliot Endocrinology Assoc	YES	YES	NO		Good	The query is for the main hospital number; this department is a part of the whole.
K MART	Kmart	YES	YES	YES		Excellent	
SHOP LITE,CLARK,NJ	Elite Marble & Tiles LLC	YES	NO		NO	Bad	There is a spelling error in the query, user want to search 'shop rite'.
Videos	Family Video	NO			YES	Good	The intent is not clear, but a video rental store is a reasonable interpretation.
amarillo sushi buffet	Tsunami Japanese Steak House	YES	NO		NO	Bad	This is either a search for sushi in Amarillo, or for a place called Amarillo Sushi Buffet. Not finding the latter with research, we assume it's a category. After investigation, this restaurant has no sushi.
ameristar casino st charles mo	Ameristar Casino St. Charles	YES	YES	YES		Excellent	
bars Columbus, Ohio	Applebee's	YES	YES	NO		Good	The intent is clear to search "bars" and there are bars in the area. Applebee's has a bar, but its primary business is restaurant, it is not the best choice of bar.
big lots Pennsylvania 18016	Big Lots	YES	YES	YES		Excellent	
campgrounds Camano Island, Washington	Lake Goodwin RV Park	YES	YES	YES		Excellent	The intent is clear to search for a camp ground.

Query	Result Page	Has dominant intent?	Match the dominant intent?	Exact match?	Does this result exactly match one reasonable interpretation of the query?	Rating	Comments
certified automotive Alabama 36606	Certified Auto Center	No			YES	Good	User could be looking for a certified car repair shop or a certified car dealer. Because there is no exact name match, we cannot be sure which they mean.
chiropractor St Croix Falls, WI	Foundations In Health Fitness	YES	NO		NO	Bad	
chrysler dealer in Brooklyn Brooklyn	Larchmont Chrysler Jeep Dodge	YES	YES	YES		Excellent	Chrysler is one of the major businesses of this result, so it satisfies the query very well.
churches New Miami, OH	Glory Road Baptist Church	YES	YES	YES		Excellent	
cleveland museum of art	Museum of Contemporary Art (MOCA)	YES	NO			Bad	Because there is an exact name match to this query, we treat it as a Specific Target Location and not a category query. The result is not related, and so Bad.
community care center North Carolina 27101	Community Low Vision Ctr	YES	NO	NO		Bad	
hancock fabrics	Hancock Fabrics	YES	YES	YES		Excellent	
import auto salvage dallas tx	5 Star Auto Mall Import Svc	YES	NO		NO	Bad	
Lennox	Lennox Marketing	NO			YES	Good	The query is ambiguous and the result has limited information. Current result is a reasonable interpretation of the query.
Motorcycle	Lee's Crossing Tires & Svc	YES			NO	Bad	Dominant intent is to buy a new motorcycle. A tire shop is not reasonable alternate interpretation.

Query	Result Page	Has dominant intent?	Match the dominant intent?	Exact match?	Does this result exactly match one reasonable interpretation of the query?	Rating	Comments
muellers Carver, Minnesota	Mueller Jennifer A	NO			NO	Bad	By research from Bing/Google, this query intent is too diverse, and the possibility of "Jennifer A" is too low.
panera Bridgewater, New Jersey	Panera Bread	YES	YES	YES		Excellent	By research from Google/Bing, (remove the location words), the dominate intent of Panera is to search "Panera Bread."
Park	Piedmont Park Conservancy	YES	YES	YES		Excellent	
pawn shops in Camden, NJ	Cash Express	YES	NO		NO	Bad	Cash Express is not a pawn shop.
piano store seattle	A-1 Piano Sales & Rental Inc	YES	YES	YES		Excellent	
post office	United States Postal Service	YES	YES	YES		Excellent	
reo's Jacksonville, FL	Florida Reo Co	YES	YES	YES		Excellent	Dominant intent of "reo's" is "real estate owned", the most likely the user want to get a company that is dedicated on REO business.
restaurants 3694 PERSIMMON Cir, FAIRFAX, VA, 22031	Pad Thai Restaurant	YES	YES	YES		Excellent	
seafood restaurants Mayport, Florida	Ragtime Tavern Seafood & Grill	YES	YES	YES		Excellent	
tacoma mall	Bridgeport Mall	YES	NO		NO	Bad	This is a Name Query with Specific Target location.

5.3   BEST PRACTICES / ADDITIONAL GUIDANCE

Some ambiguous cases need more information to interpret. Use these examples to get an idea of the kinds of choices to make. If this is your first time reading the Guidelines, please go to section 6 to continue your introduction to the HitApp, then re-read this section to expand on the main ideas.

BUSINESS NAME OR CHAIN QUERY AND DEPARTMENT/SUBDIVISION RESULT

Query	Returns	Rating
X School district	School in X district	**Good**
School in X district	X School district	**Good**
School in X district	School in Z district	**Bad**
X School district	Z School district	**Bad**
Named School in X district	Different school in X district	**Bad**
Kent State University	Kent State University Ice Rink (Across town from main campus)	**Good** Match (Excellent Location)
Kent State University Ice Rink	Kent State University (main office)	**Good** Match (Excellent Location)
Kent State University Ice Rink	Kent State U Physics Dept.	**Bad** Match (Excellent Location)
Kent State University	Dr. Joan Brown, Math professor/ Kent State U Chess Club	**Bad** Individuals are more specific than Departments, clubs are sub-sections of the student life/activities department.
Seatac Airport	Seatac Airport Parking	**Good**
Seatac Airport	McDonalds in Seatac	**Bad** (McDonalds is a separate business that leases space from the airport, it is not a department of the Airport. The McDonalds can't transfer you to the lost baggage department)

UNIVERSITIES (WITH LOCATION GUIDANCE)

Universities can be Specific Target Locations, if they have one, dominant, central location. This may require investigation as there is no standard format for university names. {University of Texas at Austin} is the flagship school for the University of Texas system, even though it has a location in the name which, in other cases, would indicate a satellite campus (University of Washington vs University of Washington | Bothell). If you are unsure if or which location is the central branch, Wikipedia may be able to help. Any results in the same city as the main campus are Excellent Location.

However, because University systems are usually spread over a larger area, the expected adjacent region becomes much larger, often the entire state (or country in smaller areas). Because the other campuses in a university system are still Part of the Whole, they are a Good Match, Reasonable Location.

If a University does not have a central hub, but is instead a chain of equal branches, often you see this with for-profit schools (DeVry, University of Phoenix), then you rate it as a chain business where any of the branches are Excellent, and not an STL.

HOTELS – PARENT/CHILD/SIBLING (FOR HOTELS ONLY)

Hotels often have different sub-brands to appeal to different demographics like extended-stay, high end, budget friendly, etc. For example, Marriott has hotels called "Marriott" and also has "Courtyard by Marriott," "Townplace Suites by Marriott," and "Marriott Vacation Club". They can also have other acquired brands with different names that are part of the same "family" and often listed on the main website. Please pay special attention to how the

website presents the brand. If the query is for a hotel brand that has brand variations, as the above Marriott examples, then the result that matches exactly is an Excellent, and other Marriott branded hotels are Good. Hotels that are not Marriott branded, even if they are part of the same parent company, are not a match for that query.

For Brands that are not also hotels, (AccorHotels, Choice Hotels), that is, there is no "Choice Hotel", All hotels listed in the family are Excellent. Please consult the wikipeida page here: https://en.wikipedia.org/wiki/List_of_chained-brand_hotels

Query	Result	Rating
Hilton hotel	Hampton Inn (Website logo says "Hampton by Hilton)	**Good**
Choice Hotels	Ascend Collection, Cambria Suites, Clarion Hotel, Clarion Inn, Comfort Inn, Comfort Suites, Mainstay Suites, Quality Inn, Sleep Inn, Econo Lodge, Roadway Inn, Suburban Extended Stay Hotel	Excellent
Comfort Inn	Econo Lodge	Bad, child-child not brand connected
Marriott	Marriott	Excellent
Marroitt	Courtyard by Marriott, Fairfiled Inn by Marriott	Good
Marriott	St. Regis, W Hotels, Westin, Etc. Connected only by URL / Points club note / parent holding list at the bottom. Not presented as associated Brand experience.	Bad.

SHOPPING MALLS

Excellent results for named shopping mall queries are the main shopping mall business. Services or parts of the mall itself are **Good** (es. Valet parking, playspaces, management office, stroller rentals). Stores *in* the mall may be a **Good** result IF AND ONLY IF the mall name is part of the returned Business name in the hitapp (ex. "Sears - Valley Central Mall") or the mall name is in the physical street address (ex. "123 Valley Central Mall Drive"). Without either the mall name in the Business Name or Physical Address, the match is **Bad**. Businesses that are not in the mall, but use it as a location (Sears by Valley Central Mall) are also **Bad.** A query for a named store that returns a mall result is **Bad**.   Broad categories (Shoes, restaurants, clothes) that are commonly expected to be found in most malls can be a **Good** match if research shows at least one store is dedicated to that category.

CHAIN BUSINESSES

Typically, when we have a query related to a chain business, we would disregard location for match quality. For example, if the query were "McDonalds Denver", we would still rate the match of a McDonalds in Seattle as **Excellent**.
Don't be influenced by the distance or popularity key words (i.e., {nearest} {best} {popular}, etc.). For example, if the user searches {nearest home depot} from location Boston, Massachusetts 02118, the match rating of {The Home Depot – Bellevue WA} which located at Bellevue, Washington, 98005 is still ***Excellent****, even it is 3,000 miles away.*

However, if the query is for an instance of a chain business where the location is officially part of the name, if that location is the only one in the world we can consider it unique. This will be most common in lodging and car dealerships. For example, if the query was Hyatt Olive 8, (Olive Way and 8th are the cross streets of the hotel) a side search shows that while this query is related to the Hyatt hotel chain, there is only one Hyatt Olive 8 and it is located in Seattle, which makes this a name query with a specific target location. We would therefore rate the result of the Hyatt Olive 8 hotel as **Excellent**, and any other Hyatt hotels as **Bad**. In this case, the user has indicated a specific Hyatt hotel in the chain – the Hyatt Olive 8 and we see on the website, the page for this particular hotels has pictures and information for it specifically. For categories that are not lodging or auto dealerships, take care that the location is truly part of the name. It is common for the web/map results to pull data from the store listing page of the business website, making results falsely appear as including the location in the title. We want to take care not to apply the Specific Target Location label too broadly as doing so can exclude other valid chain results.
Queries for a chain business with a store number (not location token) can be treated as the dominant intent if the store number is readily available on the business website.

BANKS / ATM

An ATM is a service provided by a bank, not a department/part of the whole.

> -If the query is for a specific bank and the result is listed as an ATM of that bank, the judgment is **Good** because you can do many banking functions at ATMs.
> -If the query is for an ATM, a bank branch with an ATM would be **Excellent** because that result fully satisfies the query and the primary business of banks is banking.
> -If the query is for a specific bank's ATM, competing ATMs are **Bad**.
> -If the query is for a bank and the result is a generic ATM, or the query is for an ATM and the result is for a different business that has an ATM (like 7-11) the judge will have to determine how likely and how much that result would satisfy the user given the specifics of the market and area.

SAME NAME, DIFFERENT RESULTS

There can only be one dominant intent for a name query, and results for that dominant intent can warrant an **Excellent** rating. Other reasonable interpretations for a name query can also be considered relevant and warrant a **Good** rating. It is possible there are NO dominant intents for a name query, and if you cannot determine which entity is the most likely dominant intent, all equally relevant results would be **Good**. If the result is not a reasonable interpretation of the query, then you would rate it as **Bad**. The intent of a name query is for the type of entity, (similar to the Edgewater example) but if there are multiple businesses with the same name of the same sort, even if they are unrelated, they are rated equally. Ex. {Hotel Eros} of serveral unrelated hotels with the same name and a coffee shop called "Hotel Eros", use density and user location to determine if the dominant intent is hotel, coffee shop, or unclear. Then, all "Hotel Eros" of that type are equally valid for match.

SIMILAR NAME, DIFFERENT BUSINESS

Query is a business, returns a business with a name very similar to the queried business.

In cases such as this, a **Good** rating should be applied to those results that are a reasonable interpretation of the query, that is, a user would be likely to expect that result for that exact query. If it is unlikely that a user would expect that result, mark it **Bad**. For example, if the query were McDonalds (where the clear and overwhelming dominant intent is related to fast food chain) and the result was "McDonald Collision center", we assume that no one would be looking for the "McDonald collision center" with the query "McDonalds." Just because there are similar words does not make them reasonably related.

> Market: EN-US
> Query: LAX
> User Location: Chicago, IL
> Result: http://www.lawa.org/welcomeLAX.aspx
>   Los Angeles International Airport 1 World Way, Los Angeles, CA, US, 90045 · (310) 646-5252
> Match rating: **Excellent**
> There is no business exactly called "LAX." There are two businesses that are commonly called LAX, and so we need to determine which business users probably want. Los Angeles International Airport is far more popular and well known, and so we can assume that this is the Dominant Intent of the query {LAX}.

> Market: EN-US
> Query: LAX
> User Location: Las Vegas, NV
> Result: https://www.luxor.com/en/nightlife/lax-nightclub.html
>   LAX Nightclub 3900 Las Vegas Blvd S, Las Vegas, NV, US, 89119 · (702) 205-8114
> Match rating: **Good**
> The dominant intent is clearly related to the internationally popular LAX airport. However, this result is a reasonable interpretation of the query. This nightclub is called LAX, and some users may be searching for it.

> Market: EN-US
> Query: McDonalds

User Location: Chicago, IL
Result: https://mcdonaldcollision.com/
            McDonald Collision Center 8101 Southpark Way, Littleton, CO, US, 80120 · (303) 795-7014
Match rating: **Bad**
This result is not an exact match to the query nor is the word that does match do so exactly, thus it is not a reasonable interpretation of an alternate intent. This business name includes the word McDonald, but it is unlikely that any user would be searching for this collision repair company by just the name McDonalds.

If there is no dominant intent for an ambiguous name query, but there are equally viable possible intents for the query, then those results can be rated as **Good**.

USING LOCATION TO DETERMINE MATCH QUALITY FOR HIGHLY AMBIGUOUS NAME QUERIES

For the most part we should disregard location when assessing match quality, and focus on how the result satisfies the matching aspect of the query. For example, from 5.1 above:
Don't be influenced by the distance or popularity key words (i.e., {nearest} {best} {popular}, etc.). For example, if the user searches {nearest home depot} from location Boston, Massachusetts 02118 the rating of {The Home Depot – Bellevue WA} which located at Bellevue, Washington, 98005 is still **Excellent***, even though it is 3,000 miles away.*

There may be rare exceptions to this rule when dealing with **highly ambiguous name queries** where the location of the user may give us further insight into what interpretation of the query the user is searching for. An example of this is in the guidelines, for the ambiguous name query "Edgewater" (see example below). *NOTE: Once you have determined the type of entity, you again disregard location and judge match normally.*

Query: Edgewater
User location: Laughlin, NV
This query has multiple interpretations
a. "Edgewater Hotel and Casino" at Laughlin, NV
b. "Edgewater" community area at Chicago
c. "Edgewater" city in Colorado.
The dominant intent might be different based on the **user location** or **explicit location**.
User Location: If user is in "Laughlin, NV" and he searches "edgewater", the *likely* dominant intent of this query would be {edgewater hotel}, *and all hotels called "Edgewater" would be* **Excellent**. Since this is an implicit query (with user location) we can't be 100% certain of the user intent, so we could also consider other intents as **Good** if they are reasonable intents of the query (for example, Edgewater neighborhood in Chicago).

Explicit Location: If the query was an explicit location query for a highly ambiguous name query "edgewater Laughlin", the reference to the explicit location of Laughlin indicates to us that that the dominant intent of this query would be hotels called Edgewater and all other interpretations of the term "Edgewater" would be **Bad**. Since the user has specified their interest by noting a location along with the word "Edgewater" we can be certain the user is searching for the kind of "Edgewater" (A Hotel/Casino called Edgewater) in that place.

If user is not in any of these 3 cities and there is no explicit location modifier in query to assist with determining intent, we will think this query has NO dominant intent and all reasonable interpretations would be **Good.**

Query: Johnsons Motors
User location: DuBois, PA
Result: http://www.johnsonauto.com/
            Johnson Motors 1891 Blinker Pkwy, Du Bois, PA, US, 15801 · (814) 371-4444
Match Rating: **Excellent**
A side search shows that there are many different kinds of businesses called Johnson Motors in the United States, but this result is also located in the same city as the user, in DuBois PA, so chances are this result would represent the dominant intent of the user. Because the Johnson Motors by the user is a car dealership, all car dealerships called "Johnson Motors" are **Excellent**, and all other kind of Johnson Motors

(repair shops, parts stores, towing companies) are **Good**. Had the user not been located in the city of the result, we would rate all as **Good**, as a reasonable interpretation of the query. If this had been an Explicit query, all Johnsons Motors car dealerships would be Excellent, and all other kinds of businesses would be **Bad.**

DOCTORS/PROFESSIONAL PERSON SEARCH

Queries for doctors or professionals need to have some information that differentiates it from a regular person search. For our purposes, a professional would be someone who "has their name on the door" of the business, not just someone who works at a company. The query should include a professional keyword like "Dr." "attorney" "dentist" etc., or a side search with the name and explicit or implicit location should return at least one prominent result for a professional.

If there is only one name match **in the expected region** then that would be an **Excellent** Match. If there are several people with the same name in the area, then intent is ambiguous and the best rating for Match will be **Good**. Use the same match logic for other things that you use for Doctors. If the query is a full name {Dr. Joan Stephenson MD Dallas} and there is one "Dr Joan Stevensen MD" in Dallas, assume this is what the user intended with a spelling error, and that a Dr Joan Stephenson DVM (veterinarian) is not a reasonable interpretation for Match.

(Location Rating) Determine the expected region based on the information in the query. An explicit query has a clear expected region. A less specific implicit query would follow normal density rules "{Dr. Garcia} in Miami". A specific doctor name with one or very few results in the market should be treated as a dominant location, NOT a Specific Target Location. Doctors are individuals who can move and often have practices in more than one location. A result of a clinic or business (law firm, dentist office, etc.) where the queried professional works should have the same rating as the Dr themselves if that's how you would contact that professional. So the "Happy Kids Clinic" where Dr Garcia works would be the same rating as a "Dr Garcia" result if the clinic number is how you would make an appointment with Dr Garcia.

> Example: {dr. Garcia Miami, FL};
> Result {Dr. Mario Garcia} in New York, NY.
> This would be **Good** *Match*, but **Poor** *Location* since the query is ambiguous and there are several Dr. Garcias in Miami. Any Dr. Garcia anywhere in the world would be rated **Good** Match for this query.

DETERMINING BUSINESS TYPE/ QUALIFIERS FOR MATCH QUALITY

If a landing page [match result page] doesn't say what a business does and the business has no website, then do a side search to see if there is any other information out there on the business. If the only results you can find are other business page listings (e.g. yellow pages listing) then the result could be Good if some of the information available matches the intent, Bad if none of the information available is useful. This is especially important with attributes like "family friendly", "full service salon", "Romantic restaurants" and other categories where more information is needed to make a judgment other than the title and the category of the listing site.

RESTAURANT DEFINITIONS

This definition is meant to encompass the broad spectrum of the types of businesses that could be related to a restaurant.

- A restaurant is an establishment that offers a varied menu primarily focusing on food items that one can consume for a standard meal. Restaurants should offer a food menu, not just beverages or snack foods on a bar. If types of business such as night clubs or bars do not offer a food menu, then you wouldn't consider them as restaurants and they would be rated as **Bad**.
- Take out, delivery, food trucks, and fast food chains can be considered restaurants – each of these types of businesses generally offer a varied menu with typical items one could consume for meal. The focus should also be on the products the entity serves, not seating space.
- Specialty restaurants where the food menu is limited, such as ice cream parlors, pastries/cake shops should be demoted to **Good**. These specialty shops offer food that you can eat right then, but cake and ice cream are snacks, not meals.
- If the query is "restaurant" and the result is the catering department of a restaurant, a **Good** rating would

be acceptable (As catering is a Part of the Whole).

- If the result is a business that only provides catering and is not connected to a restaurant or if no menu for the caterer can be quickly found, we would rate this **Bad**. Restaurant implies somewhere that you can get food to eat right now, not later.

CUISINE QUERIES

Queries for cuisine types or food dishes: Do a search, if there are restaurants that specialize in that type of food or meal within a Reasonable or Excellent driving distance (usually city or city+) then the specialty restaurant is the dominant intent and the Excellent result, other restaurants that offer that are Good. If there are no specialty restaurants in the area, then any place that offers that type of food are Excellent. For cuisine types without further intent words (Italian, vegetarian, gluten free) the dominant intent is a meal. So for "vegetarian food" a BBQ place that only has chips and cole slaw as the non-meat options could be Bad.

MEDICAL SERVICE DEFINITION

Medical provider offices often use the same terms interchangeably (urgent care/ Walk-in Clinic). Use the information available to determine which category the business best fits into. Note that the entity name may not include the keywords below, investigate the websites to see what services and staff are available to make your decision. A result of a different provider type is **Good**, as in the Lodging logic below. Note: A general query for {doctor} that resulted in a specialist is **Good.** A specialist query {cardiologist} that results in a General Practitioner or different kind of specialist is **Bad.**

- Emergency Room
    - Typically open 24 hours
    - For life-threatening emergencies including trauma, unconsciousness, heart attacks, uncontrollable   bleeding, etc.
    - Physicians / Doctors / Nurses on staff
    - Medical equipment for x-rays and labs
- Urgent Care – Walk-in Clinic
    - Typically not open 24 hours, usually only normal business hours
    - At least one physician onsite
    - For urgent medical conditions that are non-life threatening
    - May have medical equipment for x-rays and handling mild trauma (non-compound bone fractures, etc.)
- Store Clinic / Care Clinic
    - Typically not open 24 hours, usually only normal business hours
    - No physicians onsite, only Registered Nurses (RN, ARNP, FNP, NP) or Physician's Assistants (PA-C)
    - No medical equipment for x-rays or trauma. (may handle minor scrapes, cuts and burns)
    - Usually offer wellness & Preventive care, management of chronic conditions, some labs, vaccines

DIRECTORIES / LISTINGS

Queries for a service that result in a directory, {dentists = directory or other service that lists dentists} is Bad. Bing is the listing service, it should be returning individual results. Queries for listing services should be treated as Non-Directory queries and marked "Broken."

NON-DIRECTORY INTENT QUERY (DIRECTORY AND LOCAL INTENT ARE THE SAME)

Queries that are Non-Directory intent should be marked Broken-Not local Intent. Non-Directory queries include:

- More than one different explicit location, not a narrowing (Seattle Washington is ok)

- Address queries {123 Main St Hometown, ST} **Unless** the address is for a business.
- Phone number queries **Unless** the phone number is for a business, then consider as address query.
- Location only queries {Seattle} (do a search to make sure ambiguous locations don't have other meanings)
- Informational queries {history of Seattle}
- Keywords like (Calendar, showtimes, tickets, directions)
- Online businesses and businesses without retail stores or offices {facebook, GrubHub, Zappos} unless they have directory modifiers {Google office location} or {Google in Kirkland}
- Name queries without business intent {John in Bellevue} {John Doe Facebook}, celebrity names
- Government agencies that are national or do not provide direct, customer based service {FBI} {National Forrest Service} unless the query includes a location or local modifiers {FBI Seattle} (local government offices are Directory, ex. Police, Emergency services (such as fire and ambulance), Department of Motor Vehicles, Department of Liscensing, Unemployment, DSHS, electric companies, parks department, water/utility companies, etc)
- Newspaper, radio stations, television stations, other media outlets
- Any employment queries unless the query is for an employment agency {employment centers in London},
- Transit queries including directions, flight/route information, transit companies, cruise lines {Amtrak} {United Airlines} without Explicit locations or Directory modifiers like {American Airlines Office},
- Professional Sports teams, (in some markets called clubs), etc. unless they have Directory keywords {Manchester United **team store**}
- Events that do not recur at a permanent location.
- Chain business queries with Country level explicit location. (Five Guys UK, Audi India) **Unless it is a MapView Query,** then judge as normal. (If the user is looking at a map, they are looking for the results in that area, queries entered in other search pages are informational, not Local)

QUERY FOR A PRODUCT/ PRODUCT CATEGORY

The kind of experience we want to return for Product queries has changed, and so the guidelines about what is and is not Directory are below. Please review the section closely, pay special attention to which pieces of information change the ratings, and which do not. This is the beginning of an experiment, and as the results are alanyzed, these guidelines will be refined and updated.

Classification	Sub-Classification	Definition	Examples
Brand query	With dedicated store		{honda cars} Directory {Nike shoes} Directory {Apple seattle} Directory {Dr Schultze's (mostly online with single flagship store)} Directory if user is in city with flagship store, Non-directory elsewhere
	Without dedicated store		{Milwaukee tools} Non-Directory – Brand only {Clorox target} Directory – Brand + Store
Product category	Shop or Wide product category	Describes large sets of products where often stores will focus on that particular product category or have departments / sections / aisles devoted to such category.	{bridal dress} Directory -store {lcd tvs} Directory - Dept {Party supplies tiffin ohio} Directory -Store {Furniture} Directory - Store {Tires in Houghton lake} Directory - Store+Explicit {Fitness equipment} Directory - Store/Dept {Cabinets in Portland or} Directory - cabinet maker or department

		Very likely a store specializes in the desired product category as it is sufficiently large	{Mobile homes / Tiny Homes / Log Cabins} Directory – if new intent, as you would go to a showroom to pick a model and have it delivered to your land. More detail (1 bedroom tiny home), clear placed housing intent (moble home with land) Non-Directory Housing queries, not Product. {Drugs / Vitamins / Medications / Alternative Medications} Non-Directory. Differences in market control of these substances and distribution make us unable to return good results in the Local Relevance experience.
	Narrow product category	Like above, but unlikely a store specializes only in the desired product category	{baseball cleats} Directory -Department {tablets} Directory - smaller section than LCD tvs, but still a broad section with different styles/brands {kitchen cleaners} Directory - Aisle in store {caulking} Directory - many different kinds {faucet parts} Directory - large part of plumbing aisle, faucets {9mm pistols for sale tulsa} Directory - category with buying intent& Explicit location {Party supplies tiffin ohio table rental} Directory - product category and service & Explicit location. Results with both E, results with one, G {Computer parts el paso} Directory - aisles/store sections with explicit location {Dirt for sale near me} Directory - buying intent, many possible types of dirt {Kids suit Brooklyn} Directory - department/boutique & explicit {Electrical outlets Milwaukee} Directory - many different kinds of outlets & explicit. Milwaukee brand does not make outlets {mountain bikes} Directory - dept in stores
Product line		Limited to a single manufacturer, but not enough to discriminate to a single or set of products that are similar in terms of price and feature variation.	{honda accord} Directory – Vehicle Make and Model. More specific (year, color, sub-categories) are Non-Directory. {Monique Lhuillier bridal dress} Directory - many bridal stores list brands {apple ipad} Directory - Own stores, 1st level category on webiste {samsung lcd tvs} Non-Directory - no self stores, Brand+ kind of tv with no explicit or store name {nike running shoes} Directory - own stores - several kinds of running specialties {GE Silicone caulking} Non-Directory, no self stores/explicit/other store name, brand + more specific than narrow category {faucet aerator} Directory - different brands, types {Clorox cleaners target} Directory - Clorox primarily makes cleaning products so the scope hasn't narrowed much.
Product	Non-Directory	Limited to a single manufacturer and to a set of products	{Honda accord ex}, {Monique Lhuillier Fall 2018 bridal dress}, {apple ipad pro}, {Samsung 6 series

		that are constrained in terms of price and feature variation.	UHD}, {nike pegasus}, {GE Silicone Kitchen & Bath caulking}, {grohe faucet aerator}

RETAIL OUTLETS

QUERY FOR A SERVICE THAT BUSINESS CATEGORIES TRADITIONALLY PROVIDE

Queries for services that businesses traditionally provide, ex. {flower delivery}:florist, {Pizza delivery}:pizza restaurant, {teeth whitening}:dentist.

- Website or side search confirm service is available – **Excellent**
- Website or side search does not specifically mention service, but also does not indicate they do *not* provide service – **Good**
- Website or side search indicate service is not provided (florist: says "no delivery", Pizza: says "Dine in or Take Out") - **Bad**

PREFERENCE GIVEN TO ENTITY TITLE ON RESULT PAGE

In cases where the result's Business Name matches the dominant intent of query, but the result's other attributes do not match (for example, if the website listed leads to a department of the business), preference should be given to business name when assessing match quality. For example, in the screenshot below, the query is University of Alabama, and the title of the business name matches the intent of query, therefore we would rate as **Excellent**. However, when clicking on the link provided on the result page, this leads to a department at the university. (Remember the Results page is first the Web Source, and if that isn't available, then you'd use the BIS below). This is still true when the query does not match the title, but the rest of the information does. The title and query must be a match, errors in the other details are fixed by another team.

ASSUME NEW INTENT

Dominant intent for product and merchant queries is to buy new.

Query: {Car dealer} Used Car dealer – **Good**

Query: {Second-hand clothes} New clothing store – **Bad**

RENTALS

Primary intent for Rentals is housing rentals. All other types of rental businesses are Good.

COMPETITORS

Query a business, return the competitor link (e.g., {lowes}, return {home depot})

The {home depot} is always a **Bad** result for query {lowes}, as is {burger king} for the query {Mcdonalds}.

ACQUIRED BUSINESSES AND BRANDS

Larger companies purchase smaller companies and rebrand those businesses, for example, the regional Seafirst Bank was bought by the national Chase Bank, and now Seafirst Customers are Chase customers. Do a side search to make sure it's the same business, for example, a cinema that was bought by a large chain but people still call it the local name, and not a different business of the same kind in the same location. If you are sure the (outdated) query and the (new company) result are the same entity, rate the result **Excellent**.

LODGING GUIDANCE

Lodging types can be different depending on country and context, but there are some general rules for lodging queries. Think about the user intent and experience; if they ask for a hotel but only a motel is available it still serves the purpose of lodging and so is a Good substitute.

Lodging requirements:

1. Ability / vacancy is non-issue with most of the results provided (excepting large events, conventions, etc.)
2. Ability to book varying stay lengths (including single night) and with short notice.
3. Ability to book varying room counts (including single rooms – most common)

- Assume that the lodging type in the business name is the classification. If they call themselves a motel, they are a motel. If it is unclear from the title, use the website and side-search to help you decide.
- When a lodging result matches the type in the query, the result is **Excellent**.
- For a generic query such as "accommodation" all types of lodging would be rated **Excellent**.
- When the lodging is of a different type, but still fulfils the three rules above, it is **Good**.
- When the result is different from that intent, for example if a "hotel" in your market is a place rented by the hour for prostitution purposes, mark it **Bad**.
- Results for queries for specific requirements should meet those requirements. So queries for "dog friendly hotel," or "motel with swimming pool," "Romantic hotel" should be rated according to whether the information available supports the whole query. A hotel that specifies "no pets" is a **Bad** match for "dog friendly hotel".

SPONSORED SPORTS STADIUMS

Queries for a business that have a result of a professional sports stadium named for the business are **Good** as the result exactly matches one reasonable, but non-dominant interpretation of the query. The Dominant intent is, of course, for the queried business.

Ex. Q: CenturyLink   R: CenturyLink Field http://www.centurylinkfield.com/

Q: Suncorp   R: Suncorp Stadium http://www.suncorpstadium.com.au/

24 HOUR BUSINESSES

Queries for a 24-hour business that return results for a business that matches the remaining scope of the query,

but either is not 24-hour or you cannot tell should be rated **Good**. <mark>Special hours (holiday, specific days) are not considered for relevance.</mark>

DELIVERY

In keeping up with business trends, many places that offer delivery do not deliver themselves, but will contract with a delivery service. If a query is for delivery and the business website advertises delivery, then the match is valid.

STAR RATINGS

For Lodging, Stars are a standarised system that specifies the types of amenities available. For specific star queries, one star more or less is **Good,** more than that is **Bad.**   For other businesses, including restaurants, the query must specify the rating system to qualify as an objective keyword. For {two star restaurant} we ignore the stars. For {two Michelin star restaurant} we can look on the business website or the Wikipedia listing to determine the match.

TWO BUSINESS CATEGORIES

A query for two business categories {hotels and restaurants} can have a **Good** match if the result *exactly* matches one of the categories.

CATEGORY NEAR (OTHER EXAMPLE OF CATEGORY)

<mark>For these types of queries, {hotels near Bellagio} Bellagio would be Good. It is the same category, but the user has indicated that it's not their first choice in the query.</mark>

WEAK DIRECTORY INTENT

Some hits will have this flag in the hitapp. These are hits collected from a different hitapp, where intent would be Non-Directory according to the Directory Intent Annotation guidelines, but it has been determined in the other hitapp that a non-prominent local answer would not diminish the quality of the results for that context.
FOR THESE TAGGED HITS ONLY("Weak Directory Intent"), follow these instructions. At this time, Location judgment will be Excellent for every query so we can focus on the Match portion. When you get to the Match page, assume there is Directory Intent, and judge according to regular Match guidelines WITHOUT the Non-Directory exceptions.

QUERY:	counter top installers in fullerton ca
TAGS:	Weak Directory Intent
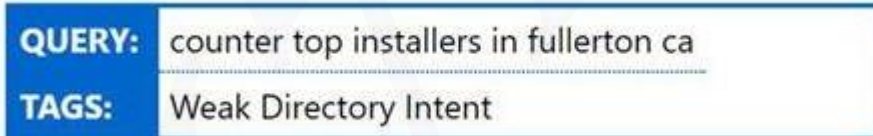
Chain, Category, and Full Name queries will most likely have clear intent for the entity, even if the modifiers are traditionally Non-Directory. Chain and Category queries will likely be either Excellent or Bad for Match Quality. Full name with sub-department results will be Good as usual.
   Examples
        {Pizzahut.com} The intent is navigational, but it's clearly for Pizza Hut, so returning a Pizza Hut Restaurant near the user along with the website result may not help users, but it wouldn't frustrate them either. This would be Excellent Match.
        {Gas Prices} Intent is informational, but after results with gas price information, gas station results would probably not be a frustrating experience.
        {UW.edu} Again, intent is navigational, but also clear the user is looking for services at the University of Washington, so a main UW result would be Excellent. (UW department would be Good, like normal)

Ambiguous or Partial Name queries will be less clear, and will likely have multiple equally possible results. Most of these queries will be Good or Bad for Match.
   Examples
        {Loma Linda first opened in} Loma Linda is a city, and from context we know the user is probably not asking about the city itself, but Loma Linda University, or Loma Linda University Medical Center. There may also be other businesses in that town that locals might call "Loma Linda" for short, so any of these would be rated Good.

{Holt} Ambiguous, but as a common last name there are often several professionals with that name in cities, so any professional "Holt" would be a Good match, as would any other Reasonable business matches.

{Dharma} likely informational intent, but in many cities there are business results that are a partial match that might be useful to the user as additional results.

6 LOCATION QUALITY LABEL GUIDELINE

(return to Undertsanding the Hitapp)

How useful is the result given the location intent of the query? There are 3 levels rating for location quality: **Excellent**, **Reasonable** and **Poor**. The overall principle to judge the location quality is to ask you a question: _how well does result location match the user's expectation_?

- **Very well**, it is exactly user's expectation. ➔ Excellent
- **Reasonable**, it is not an exact match, but still useful and reasonable to user. ➔ Reasonable
- **Poor**. It doesn't match user's expectation, or match poorly. ➔ Poor

For every query, the user has an expectation based on his query intent, his location and whether he is using a map view. It is a challenging task to give a correct rating. Please strictly follow the steps below:

> Understand the **query intent**
>
> ⬇
>
> Identify the **expected region** based on **query intent category**
>
> ⬇
>
> Give the initial location quality rating
> **(Excellent, Reasonable, Poor)**
>
> ⬇
>
> If necessary, adjust the rating based on **result density, travel cost** and **other factors**
>
> ⬇
>
> Give the final location quality rating
> **(Excellent, Reasonable, Poor**)
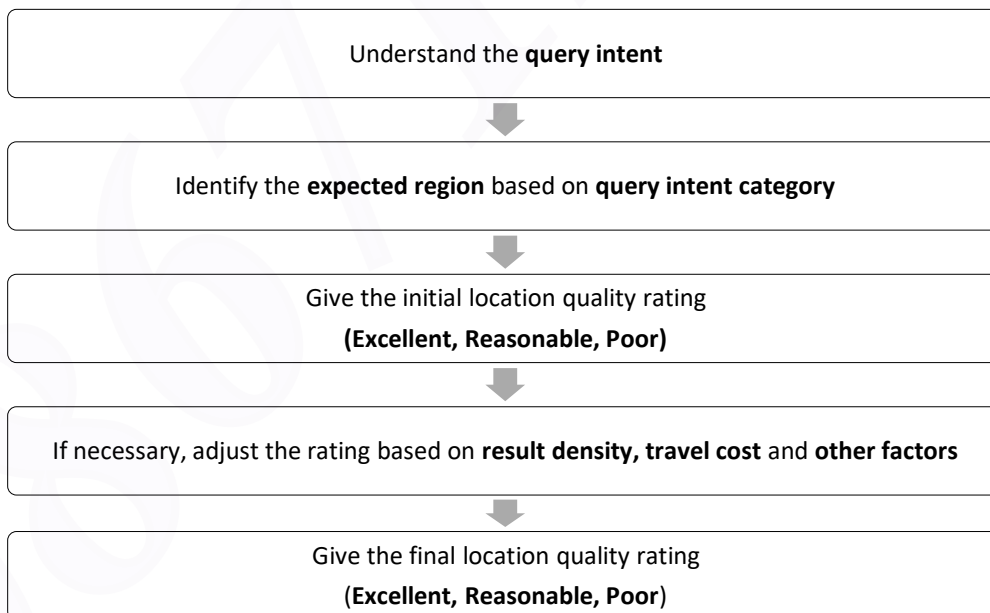
When judging the location quality, please don't be influenced by the matching quality and popularity. Make the decision based only on the quality of the location. For example, if user searches {wal-mart} from location {Bellevue, WA, 98004},(Point A) if the result is a {safeway} at {300 Bellevue Way NE, Bellevue, WA 98004},(Point B) then the location quality rating is still **Excellent** (of course the matching quality rating is **Bad**).

6.1 UNDERSTANDING THE LOCATION CONTEXT

To judge the location quality, it is very important to understand the location context. That is, what location the user probably wants based on the way they searched. There are 3 ways we can try to determine what the user expects.

Explicit Query	When a target location is specified in the user's query (i.e., {coffee near Bellevue})
Map View	When user searches the query in Bing/Google maps (Map view is optional, only a few queries will have this)
User Location (Implicit Query)	**IP Location**: from user IP when they use computer or mobile without GPS **GPS Location**: from GPS when they use mobile and turn on the GPS

A.   THE EXPLICIT QUERY LOCATION

(return to Understanding the Hitapp)

Queries are processed prior to this HitApp to identify the location tokens. When you are judging, please use the "Explicit Location (Detected)" unless you believe it is incorrect. If a query is an Explicit Location query that does not have the information filled in, please input the correct information in the Edit Box (circled below).

For most of the explicit queries, the location intents are clear and easy to understand. For example, {07302 apartments}, {Bamboo garden near 202 106th Pl NE, Bellevue, WA 98004}, {Cabo Cantina in Brentwood, CA}, etc. However, some query target locations are ambiguous and have multiple interpretations, below are some examples:

Query	Explanations
Gainesville	a. Gainesville, FL b. Gainesville, VA
Nashville	a. Nashville, TN b. Nashville, KY
Springfield	a. Springfield, MO b. Springfield, IL c. Springfield, MA d. Springfield, VA e. Springfield, OH
LA	a. Louisiana state b. Los Angeles, California
Washington	a. Washington state b. Washington city

Below are some basic ways to narrow down the location intent if there is any ambiguity. Please follow the steps in order:

1. **Try to use full query to determine ambiguity**. For example, if the user searches {schools near brightwood springfield}, then most likely they want the result from {Springfield, MA}, because only this city has the neighborhood {brightwood}.
2. **Try to use popularity to determine ambiguity**. If one location candidate is **significantly** more popular than others, then it is the dominant intent. For example, if user search {airport LA}, to be a location, {Los Angeles} is

more popular than {Louisiana}, so we think most likely the user wants the result near {Los Angeles}, not {Louisiana}. If the popularity difference is not significant, then treat them as equally popular.

3. **Try to use map view to determine ambiguity**. If current user map view is significantly closer to one candidate, then this candidate has dominant intent.

4. **Try to use user location to determine ambiguity**. If one location candidate is significantly closer to user, then it is the dominant intent. For example, if user location is in FL, and searches {Safeway near Gainesville}, then most likely the user wants the result near {Gainesville, FL}, not {Gainesville, VA}

5. **If cannot narrow down to one candidate, then all the candidates are dominant intent.**

B. THE MAP VIEW

([Return to Understanding the Hitapp](#)) ([Return to 6.3.B Judging Map View](#))

Map view is what the user was looking at when they entered the query. When user enters an **implicit query** (a query with no location terms) in the map view, most likely they want the results in current map view. However, with an **explicit query** they would expect the search engine to automatically change and show the result in a new map view.

Below are some snapshots for Bing map: (the red box is the **bounding box** of map view)
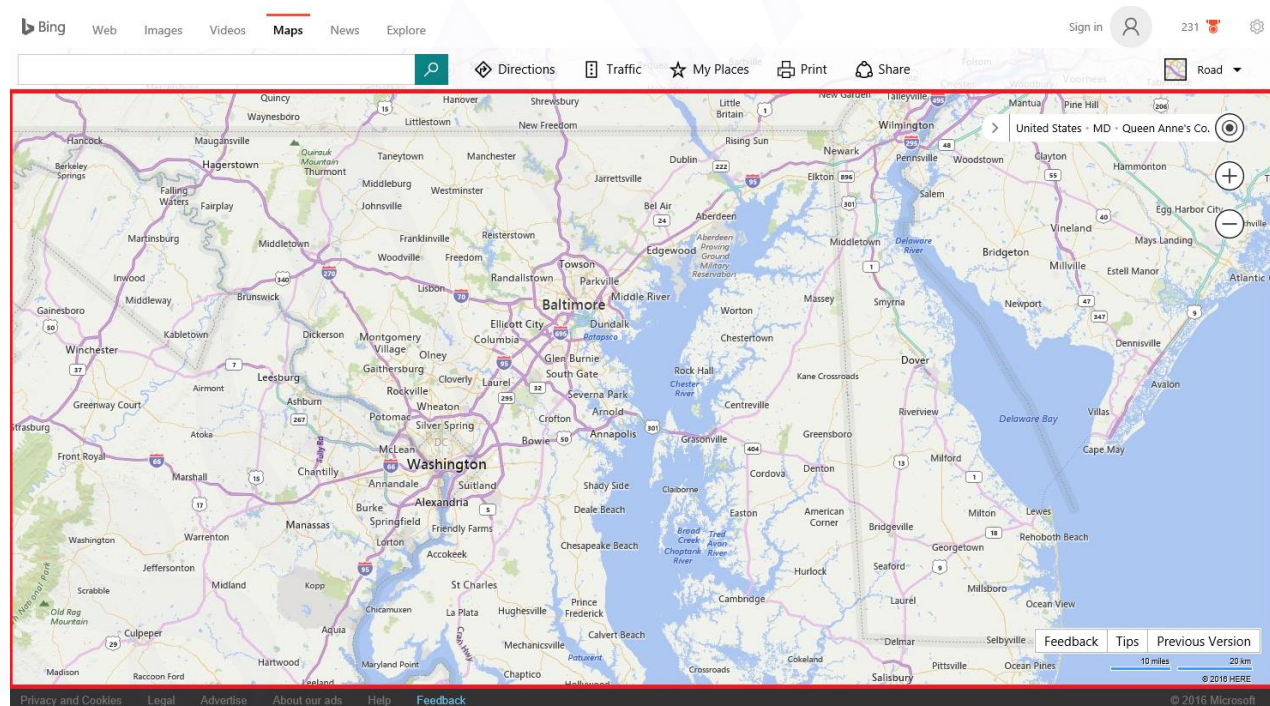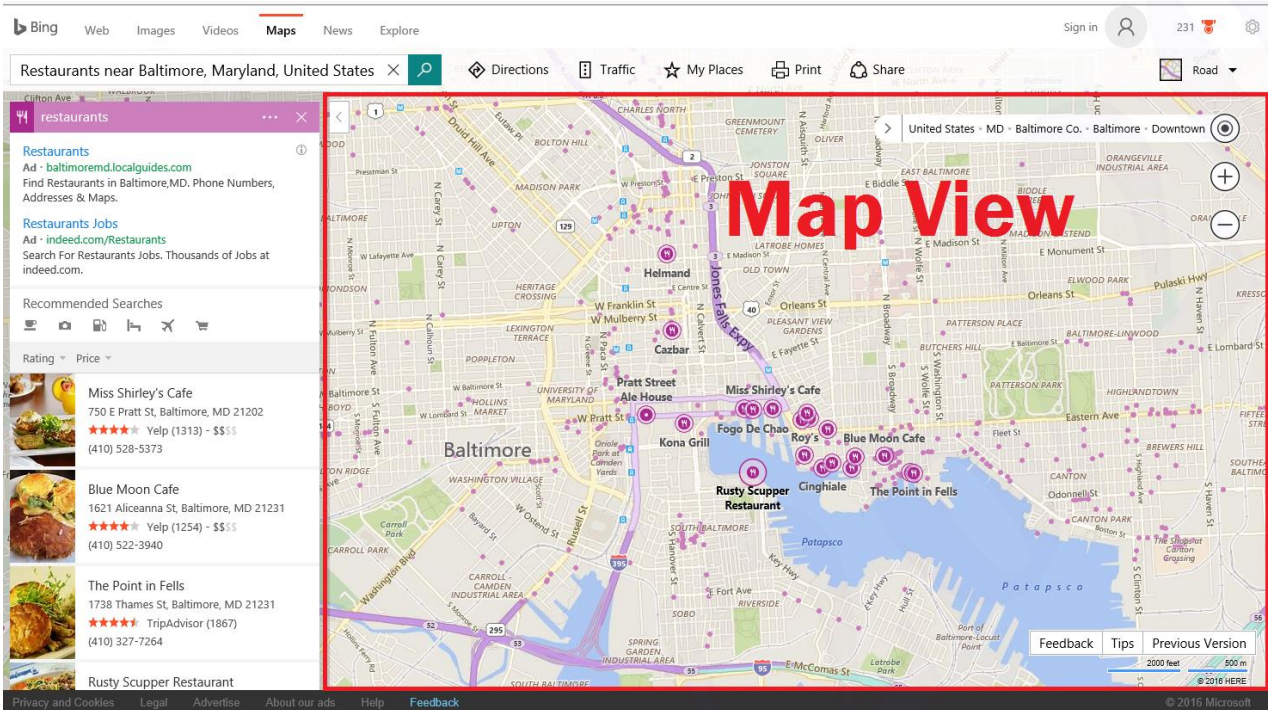
Important note: when you judge the location quality, there is only one result in the HitApp. However, it is important to consider the possibility that there are other results around the target location.

C. THE USER LOCATION

([Return to Understanding the Hitapp](#))

There are two types of location:

- **IP Location**: from user IP when they use computer or mobile without GPS.
- **GPS Location**: from GPS when they use mobile and turn on the GPS.

IP Location is a region in the map. Currently, we can get the user region on postcode level. For example, {Bellevue, WA 98004} is different than {Bellevue, WA 98005}. However, we don't know the details of exactly where they are in the postcode area. So, it is important to assume that the user could be in any location within that region.
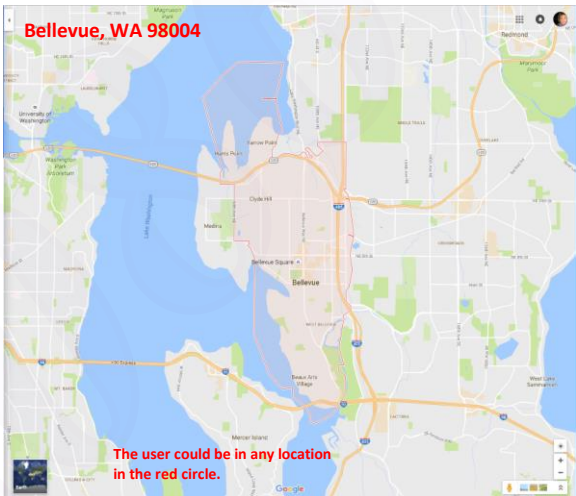
GPS Location is a point on the map that is very accurate.

6.2 IDENTIFYING THE EXPECTED LOCATION

(Return to Understanding the Hitapp)

⦿	Explicit Location (Detected)	**Factoria,Bellevue,King County,Washington,United States,North America**
○	Explicit Location	Factoria, WA
○	Map View	**30.33135, -81.6558**
○	Implicit Query (User Location)	**Burien Washington 98166**
○	Implicit Query (Specific Target Location)	

Please identify the correct expected location based on your best knowledge and investigation. Use the static priority order to determine the expected location.

1. "Explicit Location (Detected)" is 1st priority. If it is NOT empty, then it is the expected location. (However, if you believe there is a detection error, then you can select a different option based on your best knowledge).
2. If "Explicit Location" is NOT empty, then it is the expected location. (If it is empty but you believe it is an Explicit query, please select this option and input the explicit location into the edit box.)
3. If "Map View" is NOT empty, please try to detect whether its expected location is "Specific Target Location." However, Map View is always higher priority than "Implicit Query (User Location)."
4. For implicit queries, please try to detect whether its expected location is "Specific Target Location."

   IMPORTANT: Not all location terms are Explicit location markers. For example, {University of Washinton} is not Explicit because "Washington" is part of the proper name. See section 6.3.C on Specific Target Locations for more information.

The following chart will walk you through the steps of determining location. It is not a complete guide, so make sure you also read all the additional information on each section.

Before rating location, double check that the location given makes sense. Sometimes the hitapp misses or misunderstands Explicit tokens or Specifit Target Location information. Unless the Implicit user information is very specific, the origin of Point A is often not the exact user location, but the midpoint of the specified area. Always take a moment to review the information, understand the context and see if it makes sense before judging. For example, one common mistake is to see Point A near a city name on the map and assume the city is that small area, when in fact the city is much larger. Don't assume the tool always gives you all the correct information you need, this is why we need humans to confirm the accuracy of the results.

Does the Query contain an Explicit location?
(ex. Seattle, WA)

↓ No
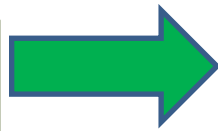
Set Explicit Location bar to explicit location in the query if empty.
-Results in the explicit location (neighborhood, street, town, city, post code, state) are **Excellent**.
-Results in adjacent locations at that level, or at best level region are **Reasonable**.
-All else are **Poor**.
See also: State and Country adjacency notes here.

Does the query contain a Specific Target Location?
(ex. Eiffel Tower, University of Washington)

↓ No

-Reset the Implicit Target Location bar to the Specific Target entity. If the tool does not find it, reset to the entity's city. Implicit target queries are always judged at city level.
-Results in the same city as the STL are **Excellent**.
-Results in adjacent cities are **Reasonable**.
-All else are **Poor**.

Is there a Mapview Box?
(red box)

↓ No

Explicit and Specific Target Locations override Mapview.
-All results within Mapview are **Excellent**.
-If the result is in a box double the original size, that is 2x as high and wide from the original midpoint, it is **Reasonable**.
-If there are no results in original Mapview box, keep doubling the size until you find a result. This is the best level bounding box and results therein are **Reasonable**.
-All else are **Poor**.

All other queries are judged on the user's location as set by the tool, the Implicit Location.
Look at the Implicit User Location. The level of specificity there is the smallest that your expected region will get.
For {Bellevue, WA} the expected region will never be Neighborhood/Zip Code.   (6.3.D)

With 6.3.D in mind , look at how many results there are for this type of query in the user's region.

Zero – No Results
-Zero queries in the User's city means we judge at city+ level.
-Results in adjacent cities are **Excellent**.
-Results in cities one more level out are **Reasonable**.
-All else **Poor**.

5 or More - High Density
-5 or more results mean we have a high results density situation. Make sure that the results satisfy the query, i.e. if the query is "McDonalds" the results must be McDonalds.
-In High density situations we begin judging at zip code level. If there are no results in user's zip code, go back to city level.
-Results in final region are **Excellent**, adjacent regions are **Reasonable**, all else are **Poor**.

From 1 to 4 – Low Density
-Fewer than 5 queries in the user's city are judged at city level.
-Results in the User's city are **Excellent**.
-Results in adjacent cities are **Reasonable**.
-All else are **Poor**.

6.3 JUDGING LOCATION QUALITY

The first step of judging location quality is to ask the question: _Does this query have a clear expected region?_

- **YES: it is a clear region query**. Based on the location context, the user clearly wants results within a defined region. It includes below scenarios:
    - ➢ Explicit query, which could be building, street, zip code, neighborhood, city, state or country.
    - ➢ Map view query.
    - ➢ Implicit query with specific target location.
- **No, it is an ambiguous region query**. Based on the location context, we don't have a clear, user-defined region. So, we need to guess. It includes below scenarios:
    - ➢ Implicit query and no map view.
    - ➢ "Search nearby" scenario in mobile when GPS is turned on.

For **clear region query**, we always use two steps:

How well the does the result location match the expected region?

- Result is in the expected region   ➔ Excellent
- Result is in the adjacent region of expected region   ➔ Reasonable
- None of above

If you select 'None of above', please investigate the **result density**,

- No result in expected and its adjacent region, current is in best level region/distance.   ➔ Reasonable
- None of above   ➔ Poor

For different location context, the definition of **expected region**, **adjacent region** and **best region** is slightly different, but they all follow this principle, please read the details in the sections below.

For an **ambiguous region query**, we use two steps to make it simple:

Step 1: Identify the expected region by query intent, how good is current result location?

- Result is in the expected region   ➔ Excellent?
- Result is in the adjacent region of expected region ➔ Reasonable?
- None of above.   ➔ Poor?

Step 2: Adjust the rating by matched **result density** and **travel cost**. Please see detail guideline here in 6.D.

A. CLEAR EXPECTED REGION QUERY: EXPLICIT QUERY
(Return to Understanding the Hitapp) (Return to Identifying the Expected Location)

Explicit query is a clear region query, so it follows the clear region query judging principle. We can give the rating based on:

- Result address exactly matches the expected region   ➔ Excellent
- Result is in an adjacent region to the expected region   ➔ Reasonable
- None of above, but current result is in best level region   ➔ Reasonable
- None of above   ➔ Poor

Expected region for explicit query, has to exactly match the user query. For example,

1. If the user searches {restaurants in Bellevue 98004}, only the results in 98004 match the expected region.
2. If the user searches {parks in Washington state}, then all the results in Washington state match the expected region.
3. If the user searches {restaurant at 202 106th Pl NE, Bellevue}, then only the result in this specific address matches the expected region.
4. If the user searches {restaurants in Bellevue Mall}, then only results inside this mall match the expected region.

Adjacent region for explicit query, has to be a region that is physically adjacent or very close to the target region, and also it matches the higher level region constraint. For example, if user expected region is {98004}, then all the zip code area that adjacent to it can be **Good**, however, if user expected region is {Bellevue, 98004}, then the adjacent zip code area in Kirkland will NOT be **Good** because they are in different city. We require neighboring regions to be at same level with the target region. For example, {Redmond, WA} is a **Good** neighbor region of {Bellevue, WA}, but it is not a **Good** neighbor region for {Bellevue, WA, 98004} because they are at different levels. (To better understand the region level, please read here in 6.3.E.)

Best level region, please select this only when

1. There are **no matched results** in both expected region and its adjacent region. Please investigate on Bing or Google before you select this.
2. Current result is **the closest to expected region**, or **in same distance level of closest correct result** (you have to investigate all the results in Bing or Google). For example, please see below snapshot. If the user searches {wal-mart Kirkland, 98034}, the result **A, B** are not in the expected region (zip code and city doesn't match) and not in an adjacent region (different city). However, A and B are the closest matched results, so the location quality rating of both A and B are **Reasonable**.
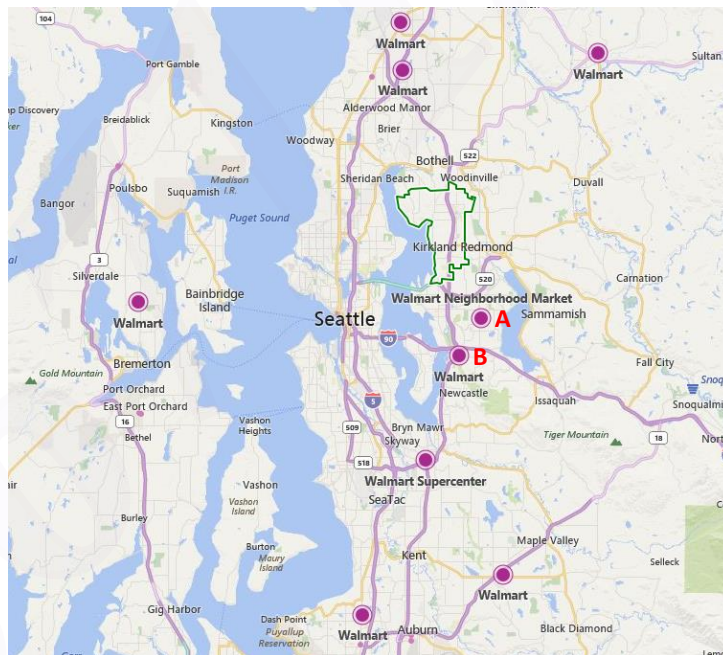
More examples for explicit query:

Query	Issued From	Result location	Location Quality Rating	Comments
Dr. offices in Hazleton, PA	*Scranton,Pennsylvania,18540*	132 E Broad St Tamaqua,PA,US,18252	Poor	Tamaqua is several cities away and there are results in Hazelton.
EAGLE TRUCK, SHREVEPORT, LA	*Sibley,Louisiana,71073*	4010 Mansfield Rd Shreveport,LA,US,71103	Excellent	Result is in Shrieveport
Elliot Hospital, Manchester, NH	*Brunswick,Maine,04011*	445 Cypress St Ste 7 Manchester,NH,US,03103	Excellent	Result is in Manchester
Northlake park community school orlando, fl	*Riverview,Florida,33578*	9055 Northlake Pkwy Orlando,FL,US,32827	Excellent	Result is in Orlando
SHOP LITE,CLARK,NJ	*Phoenix,Arizona,85013*	524 W Edgar Rd Linden,NJ,US,07036	Reasonable	Clark and Linden are adjacent.
attractions Wheeling, WV	*Nanuet, New York,10954*	13247 Interstate 70 W Valley Grove,WV,US,26060	Poor	Valley Grove is not adjacent and there are results in Wheeling
big lots Pennsylvania 18016	*Bethlehem,Pennsylvania,18016*	7150 Hamilton Blvd Trexlertown,PA,US,18087	Poor	There are no results in 18016, but the result is not the closest to Expected Region.
community care center North Carolina 27101	*Winston-Salem, North Carolina,27101*	7730 N Point Blvd Winston Salem,NC,US,27106	Reasonable	Zip codes are adjacent.
dance school 85308	*Scottsdale,Arizona,85260*	15050 N Northsight Blvd Ste 105 Scottsdale,AZ,US,85260	Poor	Zip codes not adjacent and there are results in 85308
hotels in springfield nj	*Philadelphia,Pennsylvania,19133*	60 S 31st St Kenilworth,NJ,US,07033	Reasonable	Springfield and Kenilworth are adjacent.
ice skating 90024, CA	*Santa Ana,California,92799*	4545 Sepulveda Blvd Culver City,CA,US,90230	Reasonable	No results in 90024, this is one of the closest results.
ice skating 90024, CA	*Santa Ana,California,92799*	14318 Calvert St Van Nuys,CA,US,91401	Poor	While this is the next result north on 405, it is twice as far at 13 miles away as several results 5-6 miles away.
metro pcs 30265	*Atlanta,Georgia,30309*	373 Highway 138 SW Riverdale,GA,US,30274	Reasonable	
nebraska Kansas City, Missouri	*Washington, District Of Columbia,20026*	209 N State Route 291 Liberty,MO,US,64068	Excellent	"Nebraska Furniture Mart" is the name of a very large store with few locations in the US. Kansas City actually crosses into two states, Kansas and Missouri. Given that the user is very far away and may not know exactly which side of KC the store is on, and given that the next available stores are very far, we can logically expand the

Query	Issued From	Result location	Location Quality Rating	Comments
				expected region to encompass both sides and the intended result therein.

B. CLEAR EXPECTED REGION QUERY: MAPVIEW QUERY

([Return to Understanding the Hitapp](#)) ([Return to Identifying the Expected Location](#))

For map view queries, the expected region is the bounding box. Please read here in 6.1 B to understand the bounding box.

- Result is in map view bounding box   ➔ Excellent
- Result is in the double-size bounding box   ➔ Reasonable
- None of above, but current result is best level bounding box   ➔ Reasonable
- None of above   ➔ Poor

Double-size bounding box: it is the adjacent region of user's bounding box. The rectangle has same center with bounding box, and the height and width are twice that of bounding box. For example, in below snapshot, the red rectangle is the user bounding box, and the blue rectangle is the double-size bounding box:


Best level bounding box, please select this only when there are no matched results within bounding-box and double-sized bounding box. Please investigate all matched results in Bing or Google before you select this.

Please follow the steps outlined below to find the closest zoom level bounding box:
   a. Are there are any matched results in the 2x bounding box? If yes, it is the closest zoom level bounding box.
   b. If not, are there are any matched results in the 4x bounding box? If yes, this is the closest zoom level bounding box.
   c. (Continue searching higher level regions until you find at least 1 matched result.)

How do you decide if a business is in a region? Sometimes the business is a region, even a very small part of this business is in the bounding box, and we will consider it is inside the bounding box. Below is an example, the red box is the bounding box, and the result box is the blue box. It will be considered **inside** the red box region.
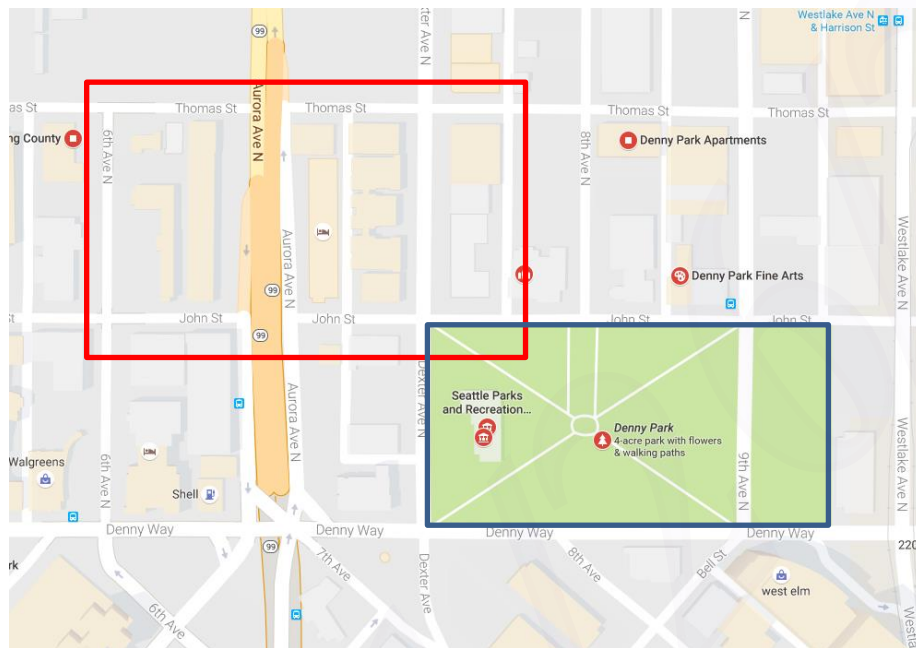
C. CLEAR EXPECTED REGION QUERY: SPECIFIC TARGET LOCATION / NAME

([Return to Understanding the Hitapp](#)) ([Return to Identifying the Expected Location](#))

For implicit queries without map view, the first step is to select whether this query expected location is a specific target location which is independent from user location. Below is part of the snapshot of HITAPP:

○	Implicit Query (User Location)	**San Juan None 00918**
◉	Implicit Query (Specific Target Location)	Ashford, WA 98304

When dealing with a query associated with a Name/Specific Target Location, our expected location region is the city level of the unique business.

- It is a name query (category query can never be specific target location)
- The query intent is clear (ambiguous queries can never be specific target location)
- It must be an implicit query
- It must have only one **Excellent** (matching quality) result in your market
  - Please disregard the reference to USA in the guidelines. This point applies to all markets.
- The **Excellent** (matching quality) result can be far from the user's location

Many of these are a tourist attraction, that's what makes them unique. Generally speaking, these attractions are not close to the user (like Disneyland, the Eiffel Tower, etc.). Naturally, if a user is looking for an attraction nearby, the correct result would still be correct.

A business doesn't have to be internationally popular to be considered specific target location. The business name and location will generally be unique and one of a kind. If you are working in the hitapp, and the query is a unique business, you should also change Point A to Implicit query (with Specific Target Location) and then follow the prompts of the hitapp. Here is an example:

> Query: DeSoto Caverns
> Park User location:
> Chicago, IL
> Result: http://www.desotocavernspark.com/
> DeSoto Caverns Family Fun Park 5181 Desoto Caverns Pkwy,
> Childersburg, AL, US, 35044
> Location rating: **Excellent**
> A side search reveals that this is a non-ambiguous name query; in addition, it can be considered a unique business with a specific target location. Even though the user location is in Chicago, we would rate this as **Excellent** for the location quality because the result is in the expected region – the same location as this global unique business.

Here are some examples: {Mount Rainier National Park} {Redmond Fire Dept} {sea world} {sandy hook elementary school}

Note that some of these examples have explicit words in the names, but because they are part of the proper name, they are not explicit queries. "Redmond Fi re Dept. is not the same as "Fire dept. in Redmond"

Searches with minor words left off or abbreviations can still be Implicit Target as long as it's obvious that there's only one. Ex: query – UNLV / actual name – University of Nevada, Las Vegas. The Quad at Whittier / actual name – The Quad at Whittier Shopping Center.

If the query doesn't match any one of above criteria, please follow "Implicit Query (User Location)" guideline.

(Note: For most name queries (e.g., {bamboo garden} {shanghai cafe}), they are very common name and a lot of businesses use this name. So, these queries use the guideline for "Implicit Query (User Location)")

More examples:

Query	User Location	Result location	Comment
University of Washington	San Diego, CA 92122	4311 11th Avenue Northeast Seattle, WA 98105	**Excellent**. In dominant target location city. For the university, only the main campus location is dominant target location.
University of Washington	San Diego, CA 92122	18115 Campus Way Northeast Bothell, WA 98011	**Reasonable**. Satellite campus in nearby city of dominant target location.
University of Washington	San Diego, CA 92122	1300 1st Ave Seattle, WA	**Excellent.** The result is actually not the location of University of Washington. However, it is in Seattle, same city of the dominant target location, so the rating is **Excellent**.
Mount Rainier National Park	Bellevue, WA	38624 Washington 706 Ashford, WA 98304	**Excellent.** Same city of dominant target location.
Mount Rainier National Park	Bellevue, WA	349 Mineral Creek Road Mineral, WA 98355	**Reasonable**. In Adjacent city of dominant target location.
Mount Rainier National Park	Bellevue, WA	7306 Waller Road East Tacoma, WA 98443	**Poor**. Not in the adjacent city, too far.
fullerton union high school	Irvine,California,92604	201 E Chapman Ave Fullerton,CA,US,92832	**Excellent**
Qualcomm stadium	San Diego,California,92101	9449 Friars Rd San Diego,CA,US,92108	**Excellent**

Note: If we know the know the specific target location then the query is not an ambiguous query. Please follow the guideline for Implicit Query (User Location) to judge the ambiguous query.

D. AMBIGUOUS REGION QUERY: IMPLICIT QUERY (USER LOCATION)

([Return to Understanding the Hitapp](#)) ([Return to Identifying the Expected Location](#))

For common implicit queries (e.g., category queries and common name/ chain queries), we believe the user wants to search for something nearby him. So, the user location is the expected location. Also, we can assume that the user is intending to travel to the result location. Based on the result location quality, he might make the decision to "go" or "not to go." When judging the location quality, please assume you are the user in that specific location, and then ask yourself "*How likely will the user be to travel to the result businesses?*"

- "Yes, I will most likely go there"   ➔ Excellent
- "Maybe yes, maybe no, the location is reasonable but not **Excellent**"   ➔ Reasonable
- "No, most likely I will NOT go there"   ➔ Poor

It is a challenging task to label the location quality for common implicit queries. Generally speaking, the decision should be made only after your seriously thinking of below factors one by one:

1. The query intent category, understand the user **expected region**
2. The relevant result density
3. The travel cost / difficulty

DETERMINE THE INITIAL RATING

([Return to Identifying the Expected Location](#))

Below graph shows how to find the initial rating for the location quality of implicit queries:

```
┌─────────────────┐                      ┌─────────────────┐
│ Is current result│         No          │ Is current result│      No      ┌──────────────┐
│   in the         │ ──────────────────> │   in            │ ──────────> │ Initial rating│
│ expected region? │                     │ adjacent region? │             │      is       │
└─────────────────┘                      └─────────────────┘             │    Poor       │
         │                                        │                      └──────────────┘
         │                                        │ Yes
         ▼                                        ▼
┌─────────────────┐                      ┌─────────────────┐
│ Initial rating is│                      │ Initial rating is│
│   Excellent      │                      │   Reasonable     │
└─────────────────┘                      └─────────────────┘
```
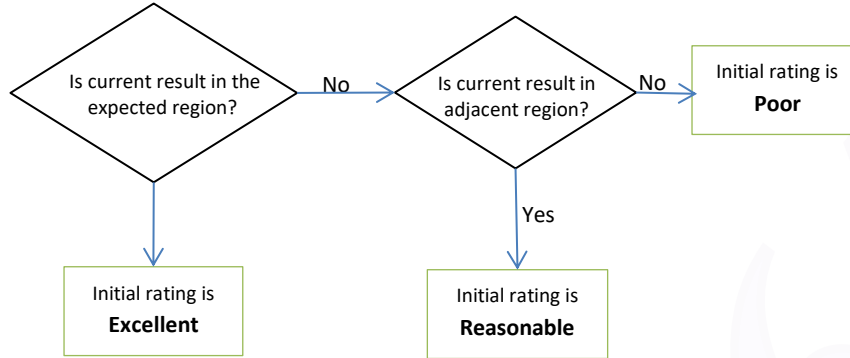
It is very important to understand the **expected region** of the implicit query. The decision is made by the **query intent category**, **user location** and **matched result density**. For example, the expected region of {Wal-Mart} is bigger than {restaurants}. Please estimate the user expected region level based on your side search results.

Expected regions will vary according to queries and the location. As seen in the Guideline examples, downtown locations will often have more results in a zip code than suburban locations. Many Expected Regions for Implicit queries will begin at City level. Then look at the density of matched results and if there is High Density, the Expected Region is reduced as explained in the section below.

Some ambiguous queries will have more than one Excellent (matching quality) result but still few enough that most users will expect to travel a bit far, (Theme parks, attractions, stores like IKEA) we treat the result location that is **closest to the user location** as dominant target location. However, if several results have a similar distance, we will think all of them as dominant target location. Queries of a type that have normal densities in some areas but are regionally based (banks, gyms, supermarkets) would still be rated poor. Someone expects to travel hundreds of miles to a vacation resort like Sea World. No users would drive that far to do some banking when they can just go online.

Step 1. Is the user closer to one result than the others?

Step 2 (if selected YES at step 1): how good a match is the result location?

- It is exactly the target location   ➔ Excellent
- It is adjacent to target location and distance is reasonable   ➔ Reasonable
- None of above   ➔ Poor

There could be multiple dominant target location if their distance to user is same level:

Step 2 (if selected NO at step 1): how well is the result location?

- Result matches exactly one of the non-dominant locations   ➔ Reasonable
- None of above   ➔ Poor
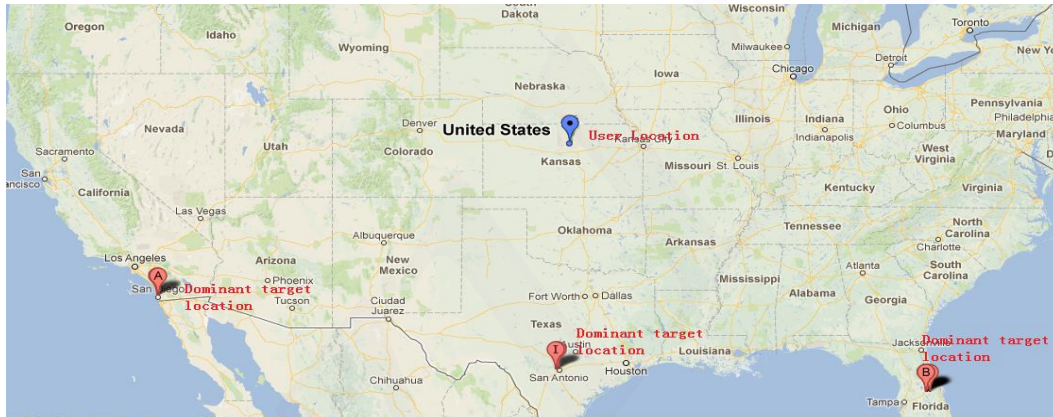
The following are some examples:

Query	User Location	Result location	Estimated region level	Initial rating	Comments
Ikea	*Everett, Washington 98201*	601 SW 41st St, Renton, WA 98057	City+	Reasonable	This is a globally famous chain but in the user's area there is only one in the state. The result is a little further than City+ Adjacent, but still in the larger metro area and so is still reasonable to think many users would travel for this result.
convenient store	*Chicago,Illinois,60608*	3219 St Charles Rd, Bellwood, IL 60104	Zip code	Poor	Beginning at city level, we find more than five results, reduce to post code/ neighborhood level where we find three results so that becomes our expected region. The result is not adjacent, several post codes away.

Motorcycle	*Pensacola,Florida,3 2505*	3 New Airport Rd Lagrange,GA,US,3024 0	Zip code	Poor	While this query is ambiguous, there are more than 5 likely results in the zip code listed so we can reduce the expected region from city to zip.
post office	*Holmdel, New Jersey,07733*	850 Newark Tpke Kearny,NJ,US,07099	Zip code	Poor	
real estate	*Gainesville,Florida, 32611*	117 Sapelo Cir Townsend,GA,US,313 31	City	Poor	
Veterans	*Houston,Texas,770 07*	407 Weidner Ave Oceanside,NY,US,1157 2	City	Poor	

ADJUST THE EXPECTED REGION BASED ON RESULT DENSITY

(Return to Identifying the Expected Location) (Return to Judging Location Quality)

Result density is an important factor to adjust the rating for common implicit queries (e.g., category queries and common name/ chain queries). For example, if the user searches {restaurants}, it is likely that most neighborhood/zip code region should have some restaurants. However, this assumption might not be true if the user is in Olympic National Park. Generally speaking, the adjusting is based on below rules:

- Adjusting for density means changing the Expected Region Level in the chart below in section 6.3.E.
- Region Level can not be more specific than the Implicit User location.
- High density is defined as 5 or more results in an expected region.
- Expand the region if there are no results in initial expected region. For example, the estimated region level of {Honda auto center} is City. If there is no result in same city, then we can set it as City+, which means results in the user city and Adjacent cities are **Excellent**.
- Reduce the region if there are too many results in initial expected region. For example, the estimated region level of {Honda auto center} is City, if there are many results (5 or more) in that city, then only the results in same neighbor/zip code could be **Excellent** *If there are results in that neighborhood/zip code.* If there are 5 or more results in the initial region AND there are NO results in the reduced region, return to the initial region.
- Neighborhood/Zip Code (or market equivalent) level is the smallest implicit location level.
- Do not use store locators to determine result density.
- Do count closed business results in determining result density.

To research the **result density** in Google Maps. When assessing density, click on the "Google Results" link in the HitApp. Google maps will often return a large number of results over a large area; only look at the results that would be **Excellent** and/or **Reasonable** Location AND Match for the query. Google sometimes returns results that have no relevance to the query and this would return a false density reading.

For example, in below snapshot, the result A is a **Poor** Location result, so we don't count it for result density.
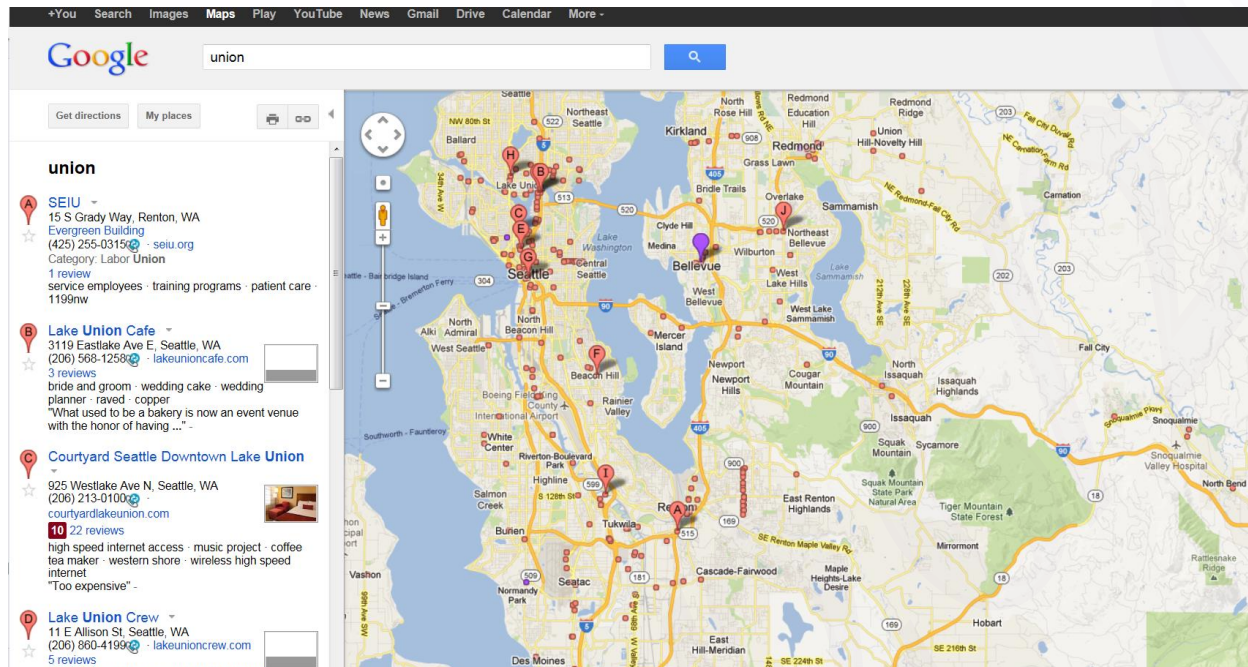
ADJUST THE RATING BASED ON TRAVEL COST

When judging the location quality, we can make the assumption that the user is willing to travel to the target location. Travel cost or difficulty can factor into the location quality. Travel that requires toll roads, ferries, border crossings, etc. might make a user more likely to prefer locations that are easier to get to. If there is a location with additional cost, time or difficulty (border waits, passports) then the location match can be downgraded.

U.S. ZIP CODE WEBSITES

There are different sites that allow you to see whether zip codes are adjacent or not such as http://www.zipmap.net/ or http://www.unitedstateszipcodes.org/ or sometimes the city-data.com site (if you type the zip code in google). Sometimes, the sites work and sometimes they don't.
Note: These sites are not official reference sites for this project but they may aid you when you need to determine adjacency and non-adjacency for explicit zip code queries.

GENERIC POSTAL CODES – FOR NON-US JUDGES ONLY

We have identified an issue with the hitapp on LIMQ for non-US markets. Sometimes the tool will use a "generic" postal code for a location when the actual postal code with the location of the user is not detected (the post code shown with this label is not always accurate). In cases such as this, when the search is an "Implicit Query (user's location)" and a generic postal code is noted for the user's location, any resulting location in that user's city should be judged as **Excellent** regardless of the postal code or push pin. We have compiled the generic postal codes that judges in markets most often come across and noted them in the HitApp. If there are no results at City level, the Expected Region may increase, but even with high density it is never smaller than City leve.

E.   UNDERSTANDING REGION AND DISTANCE LEVEL

To judge the location quality, it is very important to understand the region and distance level. For example, for locations A and B, if the user needs to drive 20 minutes to A and 25 minutes to B, they might think both A and B are equally good as the distance separating them is not significant. Pay attention to your market context. The chart

below is general guidance on going from small to large regions. If in your market, for example, a rural post code encompasses several smaller, distinct villages, village level will be smaller than post code level.

Level	Region	Explanations
1	**Address** (Explicit)	**Expected Region** is the building level of the address.
2	**Street** (Explicit)	**Expected Region** is the Street, if it's a long road or highway and the information is available the street segment within the city level. **Adjacent Region** is parallel streets and intersecting streets up to the next intersection.
3	**Neighborhood/ zip code**	Postal codes represent different kinds of areas in different countries. Use research to find out if post codes are the next largest logical region, or if there are smaller regions to be considered first (villages, suburbs, etc)
4	**City**	A city as its boundaries appear on Google or Bing maps
5	**City+**	A City and the adjacent cities
6	**County/District**	Area encompassing several towns or villages, especially in rural areas
7	**State**	State, Province
8	**Country**	A country, USA, France, Germany

Generally speaking, if two businesses are in same region level, we will think there is no significant difference between them. However, in the real world, the region level could be very different for different place. For example, the size of Switzerland in Europe might be smaller than a state in USA. In a very small city {North Bend}, there is only one zip code/neighborhood. So, please adjust the level count and size based on real user location context.

Note: The smallest expected region level of one query is based on how specific the user location is, for example, if the user location is {Bellevue, WA}. Then the expected region can never be Neighborhood/Zip code level. If the user location is {Bellevue, WA, 98004}, then high density situations could result in a zip code level Expected Region.

UK ONLY: The intent behind "post code level" for implicit queries is a smaller neighborhood level region of a larger city (all markets). The UK uses "post code" to describe a different organizational structure, so here is how to apply the GL in that market.   For London only, "Post Code" has two levels before going to City level (XY12<XY<London). Outside of London, "Post Code" is the full outward code (XY12) as a single unit. Remembering that "Post Code *Level*" is supposed to describe smaller regions of a larger town/city, first use the map to determine whether the expected region is a separate village/town (which may have many villages in the same outward code), or is within a larger city with multiple outward codes. If the expected Region is village/town level, IGNORE THE POST CODE. If the Expected Region is in a city with more than one Outward Code, that is "Post Code Level", the next level up is City level. Adjacency if the Expected Region is "Post Code Level" in a city that is not London is Outward Code-Outward code inside the city, and Outward Code-Next Town when a result is on the edges (this makes sense when you consider that once you leave city limits, the Outward Code can contain several towns, which would invert the level regions). Again, this is for Implicit queries, if a user has specified a postal code of any level, that is the Initial Expected Region.

ADJACENT REGIONS

Adjacent regions are the next available area comparable to the expected region. To determine whether a region is adjacent to the expected region, enter the target region location into Google Maps in one page and the expected region into a separate Google Maps page. Google maps will usually show the boundaries of the expected region (zip code, neighborhood, city, county, state, or country) in shaded pink/red. The Boundaries will give you an idea of how adjacent the target regions are in relation to each other.

The target region boundary does not have to touch the expected region boundary to be considered an adjacent region. Sometimes there are natural features (rivers, lakes) or less dense areas where the next available area might not actually touch as in farming towns or large rural regions. However, there should be a way to get to the adjacent region, like a bridge or a ferry for it to be truly useful to the user. If, for example a town is across a river, but the travel path requires going through another town to cross over the river, the town the user must travel through is the first adjacent town.

The quickest and best way to determine if a region is part of the expected region (is it part of the city or a separate city, town, village, etc.) is to check Wikipedia.com.

This section also applies to ambiguous expected region queries (implicit location queries.)
 Example: Milwaukee, WI
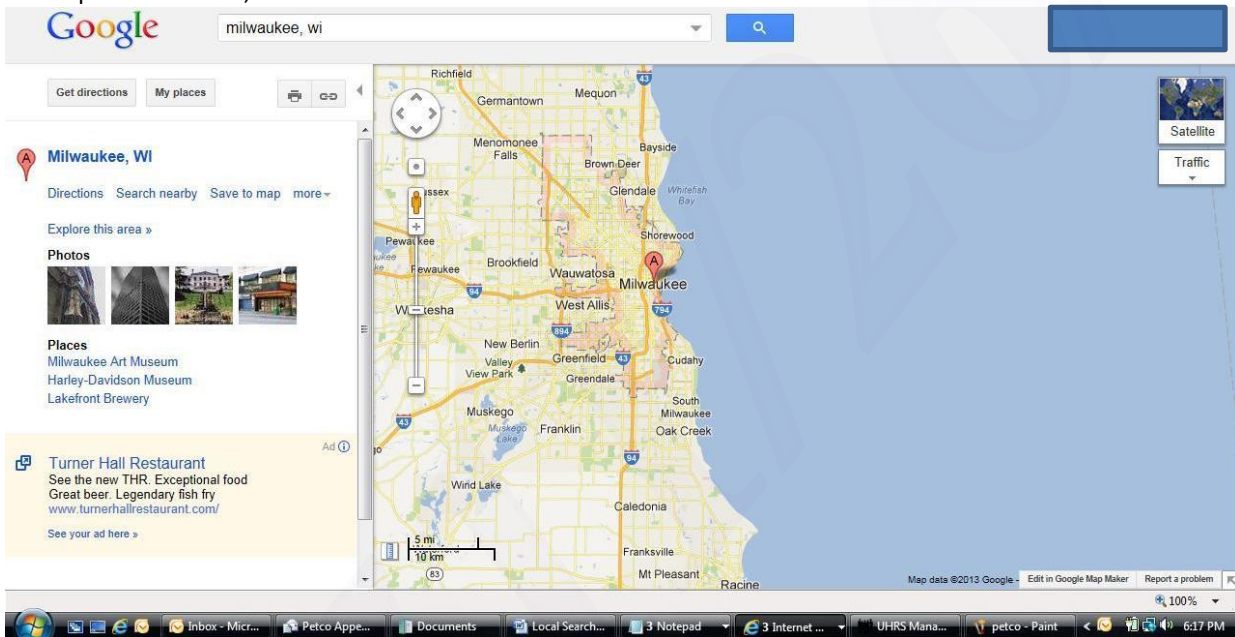
Example: Oak Creek, WI
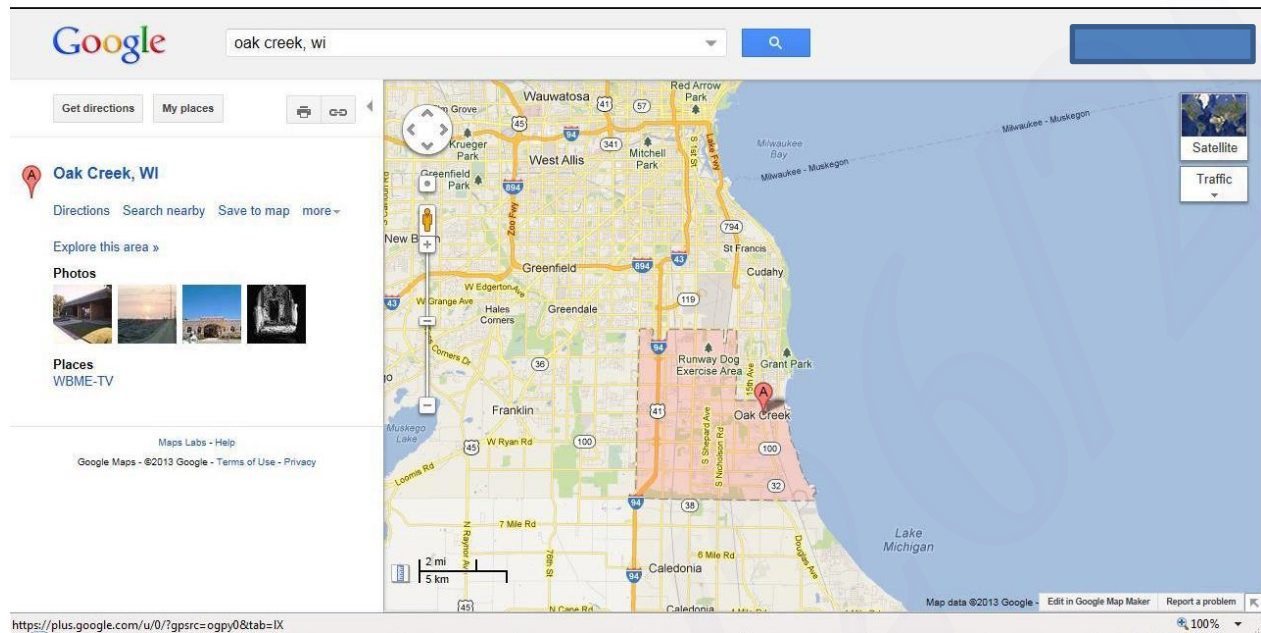
ADJACENCY BETWEEN DIFFERENT STATES, DISTRICTS, COUNTRIES

The expected region level constraint depends on the context of the query. In the United States, it is easy for a user to pass between states – no proof of identification or passports are necessary, so travel cost and time would generally be minimal and have no effect on rating if cities in two different adjacent states are next to one another. It is important to look at the context of the query. For most queries, State adjacency is going to be too far for a favorable rating unless the result and the query origin are very close to each other across the border. While it is generally easy to go from state to state, there are still different laws, tax rates, etc. that could make the user favor results in their own state.

With two different countries or districts, there could be an impact on the rating and some further side searching to verify travel cost and time would be necessary. For example, results between HK and mainland China would be downgraded due to the cost of the bridge and also the custom process. If the user is in San Diego (or suburbs near the border) and the result is in Tijuana, we would downgrade due to the customs process (which will cost you a lot of time, anywhere between 20 min and many hours) However it is also depending on the results, we think passport checking between France and Monaco is pretty much non-existent and you can drive between the 2 within minutes, same with the Vatican city and Rome, technically 2 different entities yet from the user's perspective we would not downgrade, you can travel between the two in a 5 minute walk. Belgium and Luxembourg are another example of close proximity and pretty much nonexistent customs or passport checks.
(Return to Identifying Expected Location)

6.4 CHALLENGING CASES STUDY

MAP VIEW LOCATION QUERIES

For Location and Intent Match Quality, map view queries (aka, bounding box queries) appear as the following:

Sometimes the bounding box is too zoomed out or too zoomed in (showing half the continent, or only a block or intersection). If the issue happens more than 10% of the time, this could be expected but Report a Technical Issue in one example in the HitApp and inform your manager to make sure.

Meanwhile, judge normally as per bounding box guidelines, even if the area is large.

WHAT DO I DO WHEN THE BOUNDING BOX IS EXTREMELY LARGE AND THE RESULT IS CLEARLY SO FAR AWAY THAT THE USER WOULD FIND THAT LOCATION USELESS?

Answer the questions the hitapp gives you literally, so if the result location is still within the bounding box then that location would be **Excellent** regardless of distance. For example, if Point A is in Orlando, FL and Point B is in Seattle, WA and the bounding box covers the whole United States so that both points are in the red area then Point B is still rated **Excellent** because it is inside the box.

WHAT DO I DO IF I CAN'T SEE A BOUNDING BOX?

If the map looks red to you then zoom out until you can see the whole bounding box. If the map looks normal and you can't see a bounding box, then zoom in over location A until you can see it.

WHAT IF I CAN'T SEE WHERE LOCATION A IS LOCATED ON THE MAP?

Enter the coordinates found in the location A box into Google Maps and it will tell you where this is. Go back to the map in the hitapp and zoom in over the location Google Maps indicated until you can see the red box.

THE QUERY CONTAINS AN EXPLICIT LOCATION BUT THE HITAPP IS ASKING ABOUT MAP VIEW. WHICH DO I CHOOSE?

If the query contains an explicit location, then go with the explicit location. You may need to type this into the explicit location box and then select it. Continue with your judgment following the guidelines for explicit location queries.

AMBIGIOUS PREPOSITION QUERIES

For queries with an ambiguous relationship between locations, {Thing by/near/around/next to Other Thing) the Initial Expected Region is post code level of the entity being used as a location reference. If there are no results in the post code of the reference entity (Other Thing, in the example above), then expand the Expected region to the next normal level until results are found. Do not reduce the expected region smaller than post code level for ambiguous preposition queries. Note that this does not apply for "near me" type queries.

> Ex: "rental cars by Houston Airport" (first look for rental car results in the same post code as Houston Airport. If there are none, Expected region becomes City level), "restaurants by Eiffel Tower" (check if there are restaurants in the same post code as the Eiffel Tower. If not, Expected region becomes City Level)

AMBIGUOUS STREET QUERIES

For queries where the user intends to find businesses on a particular street, e.g. {restaurants route de la Reine}, businesses located on the specified street should be marked as **Excellent** location, nearby streets as **Reasonable**, streets that are not nearby as **Bad** Location quality. If there are no businesses that match the intent of the query on the specified street, businesses on nearby street should be marked as **Excellent**. For queries that contain a street and city/neighborhood, see 6.3.A, Adjacent Regions.s

STORE LOCATORS

Do not use store locators to determine result density.

DIFFERENCES IN CITY LISTINGS

Differences in city listing on addresses can happen, as long as the zip code is correct judge the result.
Don't get caught up in the green boxes and city boundaries on maps. If the address would be in that city, even if the bounds on the map search are different, count it as that city. E.g., a house in South Park, Seattle, may not be in the green box but the address calls it Seattle.

> Likewise, addresses that list suburbs or neighborhoods that are inside the boundaries of a city still count as being in that city.

INCOMPLETE ADDRESSES

If the address is incomplete but push pin appears correct judge the result. Some address info (especially in other countries) is incomplete data based on GPS.

JUNK ADDRESSES

"Junk" address results mark broken. Example: result address box says America, America, America, America and push pin is in Spain.

CLOSED BUSINESSES

Do count closed business results in determining result density.

NEW YORK CITY

Most users would expect to get results in Manhattan, but given that we can't know for certain, judge any results in the five boroughs **Excellent**

EXPLICIT QUERIES WITHIN CITY LEVEL

If the user makes an explicit query and the business does not exist in the specified location, mark the location as **Excellent if** that is a <u>**unique**</u> business and the result is reasonably close. If the query is for a business that has other possible locations, this would be judged per the guidelines even if that business does not have a location in the city specified by the user.

Query: Disney Magic Kingdom Orlando
User location: Chicago, IL
Result: Magic Kingdom Park in Lake Buena Vista, FL.
Location Rating: **Excellent**
Match Rating: **Excellent**

Query: Sea World New Jersey
 User location: Chicago, IL
Result: https://plus.google.com/117674925341610096847/about?gl=us&hl=en
Sea Gypsy Bed & Breakfast 209 E Magnolia Ave, Wildwood, NJ, US, 08260
Location rating: **Excellent**
Match Rating: **Bad**
When you have a query that is both an explicit location query and also has a unique business associated with a specific target location, give a favorable rating to a result in the explicit location even if the business is not near that location. Sea World is not in New Jersey or anywhere near it, so we assume the user meant something else in New Jersey, even if it's not clear what.

Query: Sea World New Jersey
User location: Chicago, IL
Result: https://plus.google.com/106676451514316920943/about?gl=us&hl=en
SeaWorld 7007 Sea World Drive, Orlando, FL, 32821
Location rating: **Bad**
Match Rating: **Excellent**
When a query for a specific entity contains explicit location terms, use your judgment to determine if it is reasonably close. This is usually limited to the nearest large city that someone not from that region would associate with the query. Ex. {Walt Disney World Orlando} resulting in Walt Disney World in Lake Buena Vista, FL. {Mt. Rainier National Park Seattle} resulting in Mt Rainier National park in Ashford, WA.

It is reasonable to assume that someone not from the area would connect the queries with the major cities nearby. If the user is far from the area, these could be **Excellent** answers.
New Jersey is nowhere near a Sea World, and it is not a city, so this location is **Bad**.

FOREIGN-LANGUAGE QUERIES

Some Bing users do not speak English and type foreign queries into the search bar. We attempt to serve relevant results for these queries as well. If you can discern the meaning of the query through your own knowledge, judge the result according to the meaning of the query. If you cannot find the meaning, mark result **Broken**.

EXPECTED REGIONS AND SERVICE AREAS.

For services that come to the user, do a side search to determine the business' Service Area. If the mobile service indicates that they will travel to the Expected Location, then treat that as an Excellent location match. If the Expected Region is outside the designated Service area, rate it Poor. If there is no information on what area the service will travel to, rate as a regular business query.

NON-LOCATION POST CODES

Some markets have post codes that do not correspond to the geographical regions this hitapp intends, but are designated as high volume mail depots (large businesses like universities, hospitals or government offices) or post box codes. If your market has these codes (ex. AU has a list on the post code Wikipedia page, FR has codes designated "BP" or "CEDEX") then do not use them to determine geographical intent.

7   IRREGULARITIES/ TECHNICAL ISSUES

7.1 MATCH QUALITY RESULTS PAGE

When the Local Search result page is Bing homepage, not accessible or times out, please select the "Show Business

Information Summary" to judge the result.

If the result is like below, however, please always use "Show Web Source" unless the page is not accessible.

If the "Show Business Information Summary" still has no result, please mark the result as **Broken**.

- No business name in Business Information Summary or receive a blank page you cannot judge (no info in Business Information Summary)
- If the query has two (different) explicit locations in a query
- Example: {Real Estate Casselberry Orlando FL}, user location is in New York, NY
- If the query is for driving directions
- Result location is a comma
- Content in tool is in a foreign language you can't understand (ex., result location box or result page)
- No A and B points on map <u>and</u> you aren't able to make a valid judgment
- Black Map with no expected region when earlier recent queries displayed maps correctly
- There is no result location and a message stating the following: "This result is a place, not a business. Please use the provided map or Google Maps to determine the location between the expected location and result location, then make a location quality judgment."
- Webpages with odd domains opening when moving to the 2nd step (this includes URLs that start with "googleid" and those that start with a query.)
- When moving to the 2nd step the URL from step 2 asks to open a program on your computer
- 2nd step is missing information/has 404 page

MISMATCH BETWEEN ADDRESS GIVEN AND LOCATION IN MAP FOR POINT B

When the result pin (B) on the map disagrees with a clear, unambiguous address, rate the query Broken.

For example, in the map below:

- Explicit location is Puerto Escondido
- Point B (result) shows to be in Puerto Escondido. Reloading the map does not change point B
- However, looking at the address of the result, it is actually located in San Pedro Mixtepec – Juquila which is a nearby suburb (see map)
- The given address does not exist, so we cannot reload it in a separate map (The street does not exist in this town)

Do NOT mark 'Broken' if the result location is an 'out of country' result. The mapping tool cannot calculate distances between countries/continents, so will not display A & B points in this instance. See below example. Here, we can see the implicit user location is Sydney, NSW, Australia. The result location is Marnaz, France, Europe. We would judge as normal and rate **Poor** (as the user is likely looking for a result close by).

Do NOT mark 'Broken' if the map is zoomed out to the world, shows no A&B points and the query is an Implicit Query (Specific Target Location). In the example below, we can see the query is for the unique business name 'Yokohama Grand Intercontinental Hotel'. As per the guidelines, we should enter the target location into the 'Specific Target Location' field and judge as normal.

Do NOT mark 'Broken' if the explicit location is incomplete/incorrect and so, does not trigger the mapping tool. Perform a side search and input the correct information into the explicit location fields to trigger the map and judge as normal. (Note: For this example, the correct explicit location data is Bay City, MI). See below:
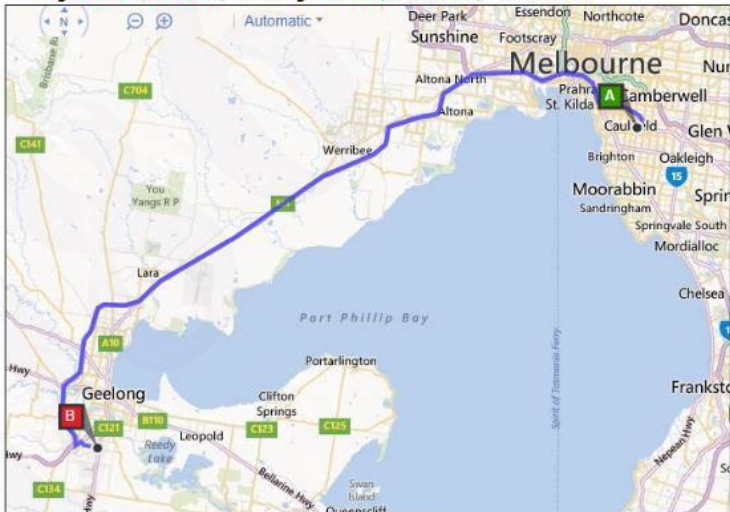
Do NOT mark 'Broken' for incomplete location data. For example, if a postal code is invalid or missing. See example below. The implicit user location is Melbourne, Victoria (Australia), but there is no postal code included. We can judge this based on city level and proceed as normal.
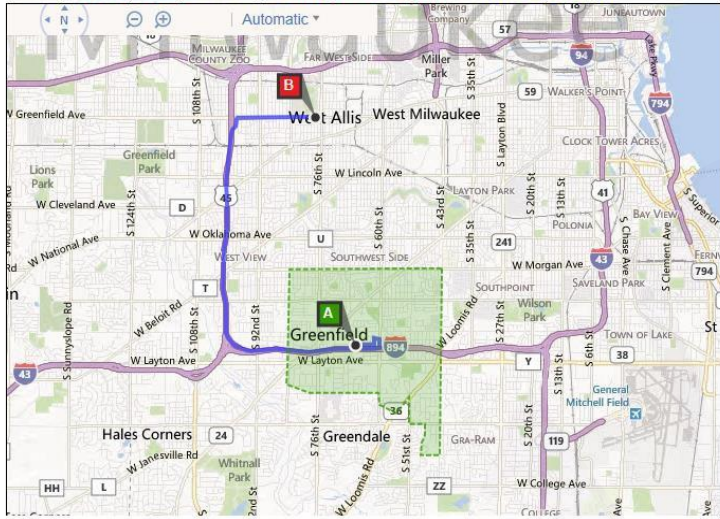
Do not mark 'Broken' for incomplete result location data. See example below. The town/city is missing from the result location. Like the example above, we can quickly side search to determine the missing information, or use the map to make our judgment (zoom in to confirm the map is showing the correct street location first).

7.4 HITAPP MAP POINTING TO WRONG DETECTED LOCATION

Sometimes the map will show a different area other than the expected location very often, including out of market. This is a known issue; please re-write the expected location in the Explicit Location window to trigger the correct location in the map, when applicable.

Example of Map Pointing to Wrong Detected Location:

From trial and error, often if there is a green shaded region and Point A is not originating from the region, Point A is not being mapped correctly. However, it can also occur when there is no shaded region. Type in the implicit user location to get the correct distance computation, then complete the judgment using the corrected distance. Remember to switch back to Implicit Query (User Location) to rate the result location.

This issue may also occur when the query has an explicit location but the explicit location is pointing to the wrong location. Follow the same procedure detailed above.

7.5 MAP IS TOO ZOOMED OUT-SHOWS ENTIRE WORLD / BLACKED OUT

Why this may occur and what to do:

1. **Judge's browser is not set to accept mixed content by** default – A judge will be able to see a prompt to allow mixed content or not. What we have seen is for the hit where this message appears, the mapping functionality does not work as expected. What we recommend is for the user to set their browser to accept mixed content by default. Here are instructions: http://support.microsoft.com/kb/2625928

2. **We could not geocode the explicit location portion of the query** (e.g., {pizza near 520 belview} – In this case, we cannot geocode "520 belview", so it is expected that the judges:
   a. Select the radio button next to the "Explicit Location" box
   b. Attempt to correct the location either by being more explicit (Philadelphia vs Philly), less explicit (Seattle, WA vs Seattle, King County, Washington, United States), or correct spacing / spelling issues (Maui vs inMuai)
   c. Click the "Map Selected Location" button
   d. Note that we still may not be able to geocode the location and then the judge will need to use Google to determine the best location.

3. **The user's map view was actually of the entire world** – In the case where we have selected Map View in the hitapp, this was deliberately set to this view by the user. In that case, it is not a bug.

4. **A bug** – If the judge is seeing the world map and the case does not fall into either one of the cases above this may be a bug. We suggest that the judge toggle between the Explicit Location and Implicit Query (User Location) radio buttons to see if the map resets to the expected view. If not, then please Report a Technical Issue in the upper right corner.

7.6 BLACK MAP AND NO EXPECTED LOCATION

Different from previous section. If your browser recently displayed maps correctly but you begin to receive black maps with no expected region in the same judging session, try to judge the query if possible (for example when the query is an explicit query). If you cannot judge the query, then Report a Technical Issue in the upper right corner and rate it Broken.

7.7 NO A AND B POINTS ON MAP

This happens with distances crossing an ocean pretty often. If you are seeing this frequently report to Manager. Try clicking on a different type of location selection and then go back to the right one, sometimes this fixes the problem. If you can still manage to judge the distance using Google Distance, then go ahead and judge the result. If the problem is such that you can't make a valid judgment, choose Broken.

If you have enough information available in Point A and Point B, try also pasting these locations into another map (in a separate browser). If you have enough information to make a decision, please rate accordingly (not broken). For example, Point B does not appear in the map below, however you have a full address in 'result location.' By loading this address in a new map, you are able to determine that this is the location of Arizona State University. This result should be rated as **Excellent**, not 'broken'

Driving: N/A Walking: N/A Transit: N/A

Automatic ▾

NORTH AMERICA

EUROPE

AFRICA

SOUTH AMERICA

Atlantic Ocean

Pacific Ocean

bing

© 2013 Microsoft Corporation   Image courtesy of NASA   Earthstar Geographics SIO   © 2013 Nokia

Judge Rating:

QUERY: arizona state university

A. Please Select Expected Location

○	Explicit [L]ocation	
◉	[I]mplicit Query (User Location)	Oslo Oslo 1006
○	Implicit [Q]uery (Specific Target Location)	

B. Result Location

4701 W Thunderbird Rd, Glendale AZ 85306

[M]ap Selected Location | Google [R]esults | Google [D]istance

Please follow the guidelines for an **implicit query**. Based on the **query intent** and estimated the expected region, how good is the result location:

○ [1] Result is in expected region (Excellent?)

○ [2] Result is in adjacent region of expected region (Reasonable?)

○ [3] None of above (Poor?)

7.8 "WE ARE CURRENTLY EXPERIENCING TECHNICAL DIFFICULTIES"

What to do when you get "We are currently experiencing technical difficulties. Please try your search again."

If you are judging Match quality for a query and the results page does not load or you get the Bing homepage, then you would select "Show Business Information Summary" and this would provide you with business details and local search result link (if available).

If the link is provided it will allow you to click on it and then proceed in verifying the match quality. If after selecting "Show Business information Summary" no link is provided, or not working or you still get the Bing homepage, you would select Broken as your answer.

7.9 IMPLICIT USER LOCATION DOES NOT HAVE CITY

In extremely rare circumstances, we don't have the city name in which the user is located and in this case, we show the folloting text in the Implicit Query (User Location) box: "When this option is selected, pushpin (a) will reflect exact user location."

> Treat this location similar to GPS user location, with the exception that the precision is lower, at neigborhood level.

Driving: 15.2 mi (30 min)   **Walking:** 14.8 mi (4 hr 45 min)   **Transit:** N/A
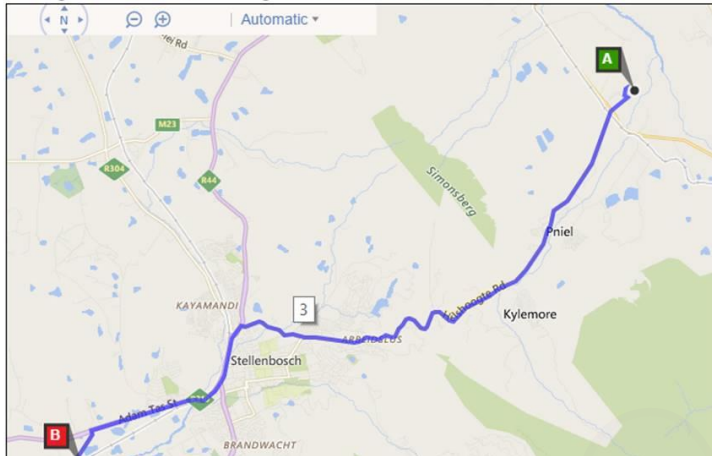
QUERY: where can we have the best pizza in town

A. Please Select Expected Location

○	Explicit [L]ocation	
◉	[I]mplicit Query (User Location)	When this option is selected, pushpin (A) will reflect exact user location.
○	Implicit [Q]uery (Specific Target Location)	

B. Result Location

Cape Winelands, Western Cape, ZA

[M]ap Selected Location	Google Map [R]esults
Google [D]istance	[G]oogle Search Results

Please follow the guidelines for an **implicit query**. Based on the **query intent** and estimated the expected region, how good is the result location:

○ [1] Result is in expected region (Excellent?)